

EXECUTIVE SUMMARY

This State Pipeline Coordinator's report is presented to outline and document the State Pipeline Coordinator's Office (SPCO) review of the application for renewal of the Trans-Alaska-Pipeline System (TAPS) pipeline right-of-way (ROW) Lease, pursuant to the provisions of AS 38.35.110 and of 11 AAC 80.065 --.085. Under the provisions of AS 38.35.110 the TAPS lease shall be renewable, for a period up to 30 years, so long as the Lessee is:

1. in commercial operation;
2. in full compliance with state law; and
3. in compliance with all terms of the Lease.

This report thus focuses on, and identifies evidence and documentation of, the Lessees' compliance with these three statutory renewal requirements, in order to provide the Commissioner of the Department of Natural Resources (DNR) with the factual record necessary for his determination on the application for renewal of the TAPS ROW lease.

Process: On May 2, 2001, Alyeska Pipeline Service Company (Alyeska), agent for the Lessees, submitted a Pipeline ROW Lease Renewal Application for the Trans-Alaska Pipeline, ADL 63574, and all related facilities, thus satisfying the renewal application requirement of 11 AAC 80.065(a). On May 23 and 24, 2001, and June 11, 2001, the SPCO published public notices of the application for renewal in newspapers throughout the State, and began a comprehensive review process to determine and document the TAPS lessees' compliance with state laws and regulations, and compliance with all terms of the lease. That review has resulted in this report.

The regulatory renewal process (11 AAC 80.065 -- .085) will continue through: (1) the DNR Commissioner's issuance of his proposed determination on the renewal application; (2) a public comment process that will include public meetings in several cities and villages that are in close proximity to TAPS facilities; (3) DNR's review and consideration of public comments received on TAPS renewal; and (4) final determination on the renewal application by the Commissioner.

Background: The SPCO, through cooperative operation of the Joint Pipeline Office (JPO) with the federal pipeline regulatory agencies, oversees and administers Alyeska's operation of TAPS through a risk-focused Comprehensive Monitoring Program (CMP). The CMP was initially developed for the JPO in 1994 by the firm of Booz-Allen and Hamilton, Inc., one of the world's largest management and technology consulting firms.

The basic purpose of the CMP is (1) to identify critical TAPS systems and operations -- based upon analysis of the potential risks to system integrity that their failure would occasion, and the potential life, health and environmental consequences from such potential failures; and (2) to develop an annual workplan for JPO oversight and monitoring of TAPS, focused primarily on the identified critical systems and operations. The annual CMP surveillance and oversight efforts result in identification of TAPS program deficiencies, provide for notification of those deficiencies and their required corrections to Alyeska, impose correction deadlines, track and retain corrective action information, and verify results. During state fiscal years 2000 and 2001,

JPO staff spent an estimated 1,000 to 1,030 work-days in the field, conducting surveillances, project monitoring and general TAPS oversight activities. From 1997 through June 2002, a total of 1,273 surveillances, 142 technical or engineering reports, and 65 assessments were performed.

The CMP verifies Lessees' compliance with those requirements of the State Lease (and Federal Grant of Rights-of-Way) that fall within the scope of the risk-focused annual monitoring program. The documentation of the CMP monitoring and oversight effort is maintained in a computer database in the JPO, and that documentation has provided the majority of the evidence relied upon by the SPCO in this TAPS renewal review.

In addition to the JPO's in-house (CMP based) monitoring of lease compliance, many lease sections and stipulations impose requirements that are the same as, or overlapped by, legal requirements of state and/or federal laws and regulations, and that are thus administered and enforced by regulatory agencies outside of the JPO. In cases where another regulatory agency's program monitors and enforces compliance with requirements that include the requirements of a specific Lease section or stipulation, the State Pipeline Coordinator relies primarily on that agency's focused, regulatory enforcement to assure compliance with the included Lease requirements. This reliance limits duplication of efforts while utilizing the subject matter expertise of each regulatory agency to best effect.

Finally, in the course of this review some lower-risk Lease requirements were found to have limited compliance documentation in the JPO database, due to the risk-based focus of the regular CMP process, and not to fall within the regulatory oversight of an outside regulatory agency. In those cases, additional surveillance assignments were added to the 2001 and 2002 JPO workplans specifically for purposes of this TAPS renewal review, resulting in supplemental compliance reports on those lower-risk lease requirements.

Summary/Findings: Based on the TAPS renewal review effort outlined above, the SPCO review has found:

(1) Lessees are in commercial operation, as evidenced by: production and transportation reports filed daily, monthly and yearly for volume of oil produced and transported through the TAPS system; payment of royalties and taxes on that production, and collection of tariffs on that transportation; and payment of state and local property taxes for TAPS facilities.

(2) Lessees are in full compliance with state law and regulation, based upon reports prepared for TAPS renewal by each state regulatory agency that identify all of the respective agency's statutes and regulations that may have application to the TAPS lessees, and provide an affirmative determination of the lessees' compliance with those statutory and regulatory requirements.

(3) Lessees are in compliance with all terms and stipulations of the TAPS lease, based on the administrative record including:

- a. state agency compliance reports, for lease requirements that are overlapped by requirements of a specific agency regulatory program;
- b. JPO database documentation developed through the risk-management focused Comprehensive Monitoring Program that is continually carried out as the normal SPCO/JPO oversight and monitoring effort; and
- c. supplemental monitoring carried out in 2001 and 2002 to review compliance with lower-risk lease requirements that have not been the focus of recent compliance review under the risk-based CMP.

Conclusion: Based upon these findings -- that Lessees' have met the three statutory requirements of AS 38.35.110 for renewal of the TAPS ROW lease -- the State Pipeline Coordinator recommends to the Commissioner that the Lease should be renewed. In addition, based on information provided in CMP Report No. 12 (TAPS Maintenance & Sustained Useful Life, June 2002) the State Pipeline Coordinator has found no reason to constrain the duration of the renewal to a period of less than 30 years.

* Cover photograph courtesy of BLM

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LIST OF ACRONYMS

ACMP	Alaska Coastal Management Program
ADF&G	Alaska Department of Fish and Game
ADGC	Alaska Department of Governmental Coordination
ADNR	Alaska Department of Natural Resources
ADOL	Alaska Department of Labor
ADOT/PF	Alaska Department of Transportation and Public Facilities
ADPS	Alaska Department of Public Safety
ANGTS	Alaska Natural Gas Transportation System
AO	Authorized Officer (Federal)
AOGA	Alaska Oil and Gas Association
ALYESKA	Alyeska Pipeline Service Company.
AS	Alaska Statute
BLM	Bureau of Land Management
CFR	Code of Federal Regulations
CMP	Comprehensive Monitoring Program
COE	U. S. Corps of Engineers
COTS	Corrected on the Spot
CZM	Coastal Zone Management
CZMA	Coastal Zone Management Act
DB-180	Alyeska Pipeline Service Company's Design Basis Manual.
DH	Dalton Highway
DOI	U.S. Department of Interior
DOR	Alaska Department of Revenue
DOT/OPS	Department of Transportation, Office of Pipeline Safety
EH	Elliott Highway
EPA	Environmental Protection Agency
ESA	Endangered Species Act
Finding	An activity, program, or product at variance with a Grant or Lease requirement.
GRANT	Agreement and Grant of Right-of-Way between the United States of America and the owners of the Trans-Alaska Pipeline
JPO	Joint Pipeline Office
LEASE	Right-of-Way Lease for the Trans-Alaska Pipeline between the State of Alaska and the owners of the Trans-Alaska Pipeline
LUP	Land Use Permit
LWC	Low Water Crossing
MBTA	Migratory Bird Treaty Act
ML	Mainline
MOA	Memorandum of Agreement
MP	Milepost
N/A	Not Applicable
OPS	U.S. Office of Pipeline Safety (DOT)
OSHA	U.S. Occupational Safety and Health Administration
PLMP	Pipeline Milepost
PS	Pump Station

PWS	Prince William Sound
QC	Quality Control
RCAC	Regional Citizens Advisory Council
ROW	Right-of-Way
SAT	Satisfactory
SHPO	State Historic Preservation Office
SPC	State Pipeline Coordinator
SPCO	State Pipeline Coordinator's Office
TAGS	Trans-Alaska Gas System
TAPS	Trans-Alaska Pipeline System
UNSAT	Unsatisfactory – An acronym for “unsatisfactory” and is an activity, procedure or product determined to be at variance with a Requirement and supported by Objective Evidence.
USC	United States Code
USCG	United States Coast Guard
USDA	United States Department of Agriculture
USDOI	United States Department of Interior
USDOT	United States Department of Transportation
USEPA	United States Environmental Protection Agency
USF&WS	United States Fish and Wildlife Service
USGS	United States Geological Survey
VMT	Valdez Marine Terminal
VSM	Vertical Support Member
YPC	Yukon Pacific Corporation

The State Pipeline Coordinator's Report For The Trans-Alaska Pipeline Right-of-Way Lease Renewal

I. State Lease Renewal Process (AS 38.35)

a. Overview of Trans-Alaska Pipeline Right-of-Way Renewal Process

The Alaska Department of Natural Resources (DNR), State Pipeline Coordinator's Office (SPCO) report is presented to outline and document the SPCO review of a Right-of-Way (ROW) Lease renewal application for the Trans-Alaska Pipeline System (TAPS). TAPS operates on a State of Alaska Right-of-Way Lease, issued pursuant to the provisions of AS 38.35 (the "Right-of-Way Leasing Act").

The TAPS ROW Lease, ADL 63574, was entered into May 3, 1974, between the Amerada Hess Corporation, ARCO Pipe Line Company, Exxon Pipeline Company, Mobil Alaska Pipeline Company, Phillips Petroleum, Company, Sohio Pipe Line Company and Union Oil Company¹ (the "Lessees") and the State of Alaska. The Lessees operate and maintain the TAPS through the services of their jointly owned Alyeska Pipeline Service Company (Alyeska), and it is Alyeska, as agent for all of the Lessees, with whom the State is principally involved. The Lease expires on May 2, 2004. On May 2, 2001, the Lessees submitted a renewal application for the Trans-Alaska Pipeline Right-of-Way Lease and related facilities. A revision to the application was submitted on May 1, 2002 to correct errors to the Line Lists and does not substantially alter the Original Application.

The requirements for Lease renewal are identified in the Right-of-Way Leasing Act at AS 38.35.110. The process for renewal is set forth in Title 11 of the Alaska Administrative Code.

b. The Lease Renewal Requirements

The Alaska Right-of-Way Act provides:

Sec. 38.35.110. Term of lease; continuation. (a) Each lease of state land for pipeline right-of-way purposes must contain a provision that the lease shall run for a specified term of not greater than 30 years, and shall be renewable for additional period up to 30 years² each, so long as the lessee is in commercial

¹ The Lessees are now comprised of Amerada Hess Pipeline Corporation (1.5000%), BP Pipeline (Alaska) Inc., (46.9263%) ExxonMobil Pipeline Company (20.3378%), Unocal Pipeline Company (1.3561%), Williams Alaska Pipeline Company, L.L.C. (3.0845%), Phillips Transportation Alaska, Inc. (26.7953%). Exxon Corporation and Mobil Oil Corporation merged in 1999. BP and ARCO merged in 2000. The State of Alaska approved the assignment and transfer of interest from Mobil Alaska Pipeline Company to Williams Alaska Pipeline Company, L.L.C in 2000 with a corrected assignment executed in 2001. Other transfers that have occurred were between existing owners and did not require approval by the State under Section 11 of the Lease.

² AS 38.35.110 was amended effective April 28, 2001, substituting "30 years" for "10 years." Originally the statute and the Lease both contained the 10-year renewal period. The amendment allows the Lease to be renewed for a period up to 30 years upon a written request by the Lessee to amend the term of the Lease. The May 2, 2001, TAPS Right-of-Way Lease

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ADL 63574

operation and is in full compliance with all state law, including but not limited to state law pertaining to regulation and taxation of the pipeline facility, and is in compliance with all terms of the lease. In making this determination, the commissioner shall take into consideration the cost of the proposed pipeline, its useful life, and the probable financing requirement for the proposed pipeline.

Similar language is contained in the Lease (Section 2).

In summary, the Lease is renewable, for a period up to 30 years, so long as the Lessees are:

1. in commercial operation;
2. in full compliance with state law; and
3. in compliance with all terms of the Lease.

If the Lessees requests (applies for) renewal, and these conditions are satisfied, then the Lease must be renewed.

Additionally, the Lessees rights and obligations to comply with the terms of the lease are also addressed by statute:

Sec. 38.35.225. Binding effect of covenants. By entering into a lease under this chapter, The lessee is bound by all the covenants provided for in the lease to the full extent of the power of the state to impose those covenants under its authority as owner of the land to be leased or under its police or regulatory powers or otherwise; provided that the right of the lessee to challenge the power of the state to require such a covenant as owner of the land to be leased or under its police or regulatory powers or otherwise is preserved until such time as action to enforce the covenant is taken by the state.

And within the Lease under section 42 “ Binding effect of Covenants”:

The parties acknowledge that all covenants of this Lease are required by the COMMISSIONER. By entering into this Lease, each LESSEE is bound by such covenants to the full extent of the power of the STATE to impose the covenants under its authority as owner of the land herein leased or under its police or regulatory powers or otherwise; provided that the rights of any or all LESSEES to challenge the power of the STATE to require any of these covenants as owner of the land herein leased or under its police or regulatory powers or otherwise is preserved until such time as action to enforce the covenant is taken by the STATE. Before commencing any such action the COMMISSIONER shall give all LESSEES written NOTICE OF INTENT to enforce, and he shall not commence enforcement proceedings unless LESSEES has failed to initiate good faith efforts to comply with the notice within thirty (30) days of said notice. Compliance with any covenant or with any such notice by any or all LESSEES, shall not constitute a waiver of its or their rights to challenge, from time to time, the power of the STATE to require or to enforce the same or any other covenant in any subsequent action to enforce taken by the STATE. A judicial

renewal application requests a 30-year renewal period for the right-of-way Lease. A revision to the application was submitted on May 1, 2002, correcting errors to the Line Lists.

finding that any of these covenants is unlawful or invalid shall not operate to invalidate this Lease or any other covenant of the Lease.

Furthermore, the grounds and processes that the Commissioner has available to bring an action in Superior Court for forfeiture of the lease is addressed:

Sec. 38.35.170. Forfeiture of lease. Failure to begin construction of the pipeline facility Within a reasonable time of the granting of a right-of-way lease under this chapter for reasons within the control of the lessee or failure of an owner of an interest in the granted right-of-way substantially to comply with the terms of the right-of-way shall be grounds for forfeiture of the right-of-way interest of the lessee or owner in an action brought by the commissioner in the superior court. Before the commencement of any action for forfeiture of an interest in a right-of-way under this section, the commissioner shall give the lessee or owner of the interest notice in writing of the alleged default and shall not commence the proceeding unless the lessee or owner of the interest has failed to initiate good faith efforts to cure the default within 60 days of the notice of the alleged default.

And similar language is used within the lease under section 30 “Forfeiture of the Lease”:

Failure to begin construction of the PIPELINE within a reasonable time of the granting of this Lease for reasons within the control of the LESSEE, or failure of a LESSEE of an interest in the Right-of-Way substantially to comply with the terms of the Lease shall be grounds for forfeiture of the Right-of-Way interest of the LESSEE in an action brought by the COMMISSIONER in the Superior Court. Before the commencement of an action for forfeiture of an interest in the Right-of-Way under this section, the COMMISSIONER shall give the LESSEE or Owner of the interest notice in writing of the alleged default and shall not commence the proceeding unless the LESSEE of the interest has failed to initiate good faith efforts to cure the default within 60 days of the notice of the alleged default.

Thus, the Lease is renewable, for a period up to 30 years, so long as the Lessees are in commercial operation, in full compliance with state law, and is in compliance with all terms of the Lease. If the Lessees requests (applies for) renewal, and these conditions are satisfied, then the Lease must be renewed.

Some pipeline operations fall under the statutory or regulatory authority of other resource or regulatory agencies (notably pollution control requirements fall within the regulatory authority of the Alaska Department of Environmental Conservation and pipeline safety requirements fall within the regulatory of the U.S. DOT/OPS). In these circumstances, the State Pipeline Coordinator coordinates with these agencies to determine if there are any pending issues of non-compliance with State law. A discussion of the process that the State Pipeline Coordinator utilizes to determine whether these conditions have been satisfied is discussed in greater detail in Section IV, below. At this point, we must first address the administrative process for consideration of renewal.

c. The Administrative Review Process

Title 11 of the Alaska Administrative Code establishes procedures for review of a right-of-way renewal application. In short, the process requires receipt of an application, public notice, a written determination by the commissioner whether the requirements for renewal are satisfied, and then an opportunity for public review and comment on the commissioner's determination. Relevant provisions of the regulations and a further discussion of the process are as follows:

11 AAC 80.065. Applications for Renewal. (a) A lessee who seeks to renew a lease of state land for pipeline right-of-way purposes must submit an application for renewal of the right-of-way lease no later than two years before lease expiration, unless otherwise provided in the right-of-way lease. Upon request by the lessee, the commissioner may waive the deadline.

(b) Upon receipt of an application for renewal, the commissioner will publish notice of it consistent with AS 38.35.070.

On May 2, 2001, Alyeska Pipeline Service Company (Alyeska), agent for the Lessees, submitted a "Pipeline ROW Lease Renewal Application for the Trans-Alaska Pipeline, ADL 63574, and all related facilities." The application was submitted more than two years before the Lease expiration date, thus satisfying the requirements of 11 AAC 80.065(a). On May 23 and 24, 2001 and June 11, 2001, the SPCO published public notices in newspapers throughout the State of the Lessees' application for renewal, thus satisfying the requirement of 11 AAC 80.065(b).

The criteria that must be met and the process that must be employed by the commissioner in making the renewal determination are set forth by regulation. It provides:

11 AAC 80.075. Renewal Determination. (a) Within a reasonable time after receipt of the lessee's application to renew a lease of state land for pipeline right-of-way purposes, the commissioner will make, in the exercise of reasoned discretion, a written determination whether the requirements of AS 38.35.110 have been satisfied.

(b) The commissioner will obtain and evaluate information that the commissioner considers reasonably necessary to make a determination under (a) of this section, including

- (1) information from the lessee, as required; the commissioner may require the lessee to provide information that the commissioner considers relevant to determining compliance with AS 38.35.110; and
- (2) independent analyses and reviews.

(c) The commissioner will base the written determination on the administrative record developed under (b) of this section, and will include a statement of the reasons and findings supporting the determination.

The final steps of the renewal process are outlined in 11 AAC 80.085, as recently amended to read:

11 AAC 80.085. Notice and Comment. (a) The commissioner will provide the written determination required by 11 AAC 80.075 to the lessee.

(b) Consistent with AS 38.35.070, the commissioner will publish notice of the written determination and a statement regarding whether the commissioner intends to renew the right-of-way lease. The commissioner will

(1) make copies of the written determination and the lease available to the public for viewing;

(2) provide copies of the written determination, upon request, to the public at cost; and

(3) if the terms of the lease will change upon renewal, provide copies of the new proposed lease, upon request, to the public at cost.

(c) The commissioner will provide the public at least 30 days to submit written comments on the written determination, and may schedule one or more public hearings.

(d) If the commissioner revises the written determination following close of the public comment period, the revised written determination will be published consistent with AS 38.35.070. The written determination, or if revised, the revised written determination published by the commissioner, is the final administrative decision 30 days after the end of the public comment period, unless the commissioner, in writing, extends that 30 day period for a specified period of not more than 90 additional days to allow for a full consideration of the comments received.

In summary, the commissioner publishes the written determination along with notice of a public comment period of not less than 30 days during which written comments are accepted. In the case of this Lease renewal, the commissioner has directed that public hearings be held during the public comment period. After the expiration of the public comment period, the commissioner has discretion whether to revise the written determination, let the original stand. The written determination, or a revised version of that determination if issued, becomes final 30 days after the close of the public comment period, unless the commissioner extends that effective date for a period not to exceed 90 additional days.

II. The Trans-Alaska Pipeline System

a. Brief History and Description of TAPS

Shortly after oil was discovered at Prudhoe Bay in 1968, the owner companies established the Alyeska in 1970 to build and operate the TAPS.

The TAPS consists of an 800-mile, 48-inch-diameter pipeline, the Valdez Marine Terminal (VMT), 11 pump stations, and various support facilities. To support construction of the pipeline, a permanent haul road was constructed from the Yukon River to Prudhoe Bay in 1974.

Ownership and control of this road was transferred to the State of Alaska in 1978 and named the James B. Dalton Highway in 1981.

The State of Alaska Lease applies to the 343.91 miles of State owned TAPS ROW. Federal (426.82 miles) and private lands (29.53 miles) account for the remainder of the 800.26 mile ROW. Alyeska has fee simple ownership of 7.65 miles of ROW including pump stations 1, 8 and 9 and the VMT.

Valves are strategically placed along the pipeline to isolate sections of the pipeline and to minimize the size of potential spills in the event of a pipe rupture. The TAPS has 177 pipeline valves: 95 are gate valves (86 remotely controlled, 9 manually operated), 1 is a remotely controlled ball valve, and 81 are check valves that automatically prevent backflow when the pipeline shuts down. All valves can be operated manually for maintenance of the line for spill isolation, if necessary. Valve locations are based on environmental and resource considerations, as well as on construction and operating requirements. The valves are placed so as to limit the amount of a spill at any point to a maximum of 50,000 barrels from static draindown. Check valves would limit backflow drainage in the event of a leak or break. Remotely operated valves are placed at major river crossings and other locations where quick closure would be necessary in an emergency.

The pump stations are similar in layout and function, although there are certain differences because of location and station tasks. The stations are housed within structures for protection against the environment and include pumps and turbine drivers (except PS 5), isolation valves, relief tanks with secondary containment, fuel handling facilities, station and pipeline control facilities, living quarters (except for PS 1, 8, and 9), office buildings, shops and warehouses, and other facilities for pipeline operation and maintenance. The pump stations are fenced and continuous security is provided at each station. PS 1 has a vapor recovery system for the crude oil storage tanks. PS 1, 3, 4, 5, 7, 9, and 12 are currently operating; PS 2, 6, 8, and 10 were placed on standby in 1996 and 1997 because of declining throughput and use of DRA. PS 7 and 12 may also be placed on standby over the next 5 to 10 years.

The VMT is the southern end of TAPS and it is located on ice-free Port Valdez at the northeastern end of Prince William Sound. The VMT site covers about 1,000 acres on the southern shore of Port Valdez. At the VMT, oil is loaded onto tankers for shipment to markets; most of the oil is shipped to the West Coast of the United States with minor amounts going to the Far East (principally South Korea, Japan and China). The VMT has storage facilities for 9.18 million barrels of crude oil and four loading berths. Berths 4 and 5 have vapor-control systems and will be the primary loading berths in the future. Berths 1 and 3 do not have vapor-control systems but can be used in special situations. Berth 2 was never built.

The TAPS facilities are routinely maintained and upgraded to ensure safe and efficient operation and minimize the likelihood of releases. In addition to visual inspections, use is made of “pigs” which are launched into the pipeline at Pump Stations 1 and 4 and carried along with the flow of oil. Pigs are mechanical devices that can be used to clean accumulated wax from interior pipe walls, to survey interior pipe diameter, to detect corrosion on the inside or outside walls of the pipe, and to measure pipe movement. If necessary, repairs can be made to the pipeline to correct problems. The largest repair to date was the replacement of 8.5 miles of corroded pipeline at Antigun Pass in 1991.

Some of the major events that have influenced the evolution of the SPCO and JPO management and oversight are outlined in Appendix A (Chronological Listing of TAPS Related Events) to this report.

b. The State Pipeline Coordinator's Office and the Joint Pipeline Office

The SPCO was established through the DNR under the authority granted by Article III of the Alaska Constitution and by Alaska Statute 44.17.060. The authority is outlined in Administrative Order 134. Administrative Order 121 established the SPCO as the State's coordinating oversight agency for TAPS, the Alaska Natural Gas Transportation System (ANGTS) and the Trans-Alaska Gas System (TAGS).

A Cooperative Agreement between the Bureau of Land Management (BLM) and the DNR to create a joint office was finalized on March 9, 1990. In July 1990, state and federal agencies were combined to create the Joint Pipeline Office (JPO). Currently, there are 13 state and federal agencies affiliated with the JPO (Table 1). The BLM and DNR are the administrative managers of the office.

Table 1. State and Federal Agencies of the Joint Pipeline Office.

The Joint Pipeline Office	
State Agencies	Federal Agencies
Department of Natural Resources	Bureau of Land Management
Department of Environmental Conservation	Department of Transportation
Department of Fish and Game	Environmental Protection Agency
Department of Labor	U.S. Coast Guard*
Division of Governmental Coordination	Army Corps of Engineers*
Department of Public Safety	Minerals Management Service*
Department of Transportation & Public Facility*	
*No agency representatives physically located within the JPO.	

The JPO is an umbrella organization of State and Federal agencies responsible for regulation and oversight of TAPS, and other non-infield oil and gas pipelines in Alaska. The JPO was formed from a cooperative effort of BLM and DNR, the two land-management agencies, to provide better service to the public and industry by eliminating duplication of work; coordinating activities; improving communication between agencies, industry, and the public; sharing expenses; and streamlining the permitting process.

The JPO is comprised of staff with technical expertise in land management, engineering, geophysics, fish and wildlife biology, safety codes, electrical codes, fire codes and oil spill planning and response (Appendix B, JPO Organizational Chart). The office houses seven engineers, eight natural resource managers and officers, three biologists, one physical scientist, one geophysicist, one fire specialist, and two safety/electrical specialist. Cumulatively, the JPO technical staff offer decades of experience specific to TAPS related oversight.

Many Lease sections and stipulations impose requirements that are the same as, or overlapped by legal requirements of state and/or federal laws and regulations, and thus administered and enforced by separate regulatory agencies. In cases where another regulatory agency's program

monitors and enforces compliance with requirements that include the requirements of a specific Lease section or stipulation, the SPCO relies primarily on that agency's focused, regulatory enforcement to assure compliance with the included Lease requirements (Appendix C). This reliance further limits duplication of efforts while utilizing the subject matter expertise of each regulatory agency to best effect.

Many of the state regulatory agencies that have substantial regulatory responsibilities that overlap lease requirements have assigned staff to work in the SPCO as members of the TAPS staff (See Table 1). The JPO is in fact a consortium of many agencies, and the SPCO's work in administration and oversight of TAPS is in substantial part involved in processing permits and authorizations of JPO constituent agencies that are required for TAPS operations.

III. DNR/JPO Ongoing Oversight and Administration of the TAPS Lease

a. Compliance Monitoring – Methodology

The JPO currently oversees and administers Alyeska's operation of TAPS including compliance with Lease requirements, through a risk focused Comprehensive Monitoring Program (CMP), that was initially developed by one of the world's largest management and technology consulting firms, Booz-Allen and Hamilton, Inc. (Final Report, Comprehensive Monitoring Program, Booz-Allen and Hamilton Inc., 1994). The CMP was developed to shift JPO Lease and Grant emphasis from response-oriented oversight to a program focused on hazard prevention.

The basic purpose of the CMP is to verify compliance with requirements of the Lease and Grant, in addition to other traditional tools. The monitoring program identifies deficiencies and establishes formal notifications of those deficiencies and correction expectations to Alyeska, imposes correction deadlines, tracks and retains information, and verifies results.

The CMP utilizes a Risk Management Analysis (RMA) process to allocate resources for Lease and Grant compliance monitoring. The Booz-Allen and Hamilton, Inc. report outlined four primary objectives of the RMA:

1. Develop a risk-based focus for JPO activities.
2. Provide the basis for linking JPO program strategy to:
 - Quality Technology Company audit findings and response actions³
 - Best JPO leverage on risk (where will resources generate the greatest benefit)
3. Provide the basis for scheduling monitoring activities.
4. Provide the basis for a comprehensive JPO monitoring program.

The Risk Management Analysis is accomplished in four steps:

1. Collect information about pipeline risks.

³ In July and November 1993, Congressional oversight hearings were conducted to examine safety and labor related issues on TAPS. As a result, Quality Technology Company (QTC) of Lebo, Kansas, was contracted by BLM to assess pipeline integrity, safety and management issues along TAPS. Phase I of the contract involved investigation of numerous alleged problems. Phase II provided recommended solutions to those items requiring correction.

2. Analyze information about TAPS hazards.
3. Determine appropriate JPO preventative measures and responses.
4. Organize measures into practicable, risk-based JPO monitoring program.

The initial RMA provided the basis for the original CMP that was developed and implemented by the JPO in 1995. Since then, the JPO has annually updated the RMA, and incorporated it into an annual CMP workplan. The JPO's annual compliance monitoring plan and activities are thus now focused primarily on identified risks and potentially hazardous components of TAPS operation.

A significant factor in development of the annual RMA, and thus in defining and prioritizing annual work efforts, is the JPO technical staff's experience and hands-on knowledge of Alyeska's processes and programs. This experience enhances JPO ability to effectively allocate resources.

b. Compliance Monitoring – Major Oversight Categories

JPO's annual compliance monitoring activities primarily fall into three categories:

(1) Project approval and monitoring. Alyeska annually submits proposals for significant construction and maintenance "projects" to JPO for review and approval. Projects are generally differentiated from baseline work by the requirement for (project specific) regulatory permits, and the consequent need for engineering analysis and design. On an annual basis, Alyeska may initiate between 200 and 300 projects.

Agency representatives from the JPO (DNR, BLM, ADF&G and DGC) attend a monthly Permits and Lands meeting with Alyeska staff, in order to provide for coordinated review of Alyeska's projects list. For each project, JPO staff advise Alyeska of project specific requirements such as regulatory agency permits; potential application of Alaska Coastal Management Program (ACMP); AS 38.05 land use permit; Notice to Proceed requirements; off-right-of-way authorization; potential permitting timelines; and other factors that need to be addressed for the project to move forward. This information is incorporated into Alyeska's project application and schedule.

For larger and more complex projects, JPO staff (permitters, land managers, subject matter experts and engineers) and Alyeska staff (engineers, subject matter experts and land managers) conduct several project specific meetings. Alyeska and JPO have agreed to meet early in the project planning stage of complex projects to identify specific concerns, such as impacts to fish and wildlife habitat, so that engineers can design the project to avoid or mitigate these impacts. Several meetings may be held to update the participants and resolve any new issues as they arise. In addition to these meetings, JPO agency representatives communicate on a regular basis with their respective Alyeska counterpart to work through issues within their area of expertise. After the final engineering design is complete and all of the necessary permits and authorizations have been acquired, Alyeska releases the Issued For Construction (IFC) package that authorizes the actual work. The IFC package includes all state and federal permits, authorizations and Lease

stipulation requirements as well as Alyeska's internal safety, quality, environmental and engineering requirements.

At this point in the project, JPO efforts shift from the planning/permitting phase to a surveillance/verification phase. JPO Field Representatives approach TAPS compliance monitoring from a multi-disciplinary perspective because many projects encompass such a broad spectrum of Lease requirements such as safety, engineering, environmental as well as specific agency permit stipulations. They use the IFC package, permits and the Lease to develop a surveillance report (checklist) that contains individual requirements (attributes) identified for compliance verification. Each project surveillance report is given a unique tracking number and, when the field-work is complete, the compliance information is transferred to the CMP electronic database.

For some projects, the entire process, from issue identification to project completion, may take a year or more.

(2) Surveillance monitoring. In addition to project based monitoring, the JPO also conducts planned and unplanned surveillances. A surveillance may be designed to serve as an independent stand-alone compliance evaluation; as the factual basis for an assessment report or technical report; as the evidentiary basis for a CMP report; and in support of an agency permit issuance determination or verification. Normally, JPO Field Representatives plan their surveillances and develop a surveillance checklist of attributes prior to going to the field. Once in the field, the Field Representative may encounter an Alyeska activity and conduct an unplanned compliance surveillance of the project. Unplanned surveillances may also occur when a Field Representative, outside the scope of the planned surveillance, observes an unrelated activity or attribute that they believe is in unsatisfactory condition.

(3) Assessments. Broader in scope than surveillance reports and tend to focus on process or systems rather than individual requirements. As previously discussed, surveillances and surveillance reports are typically used as component parts of an assessment process. An assessment requires extensive planning to identify the scope, appropriate level of sampling and the resources required. For example, an assessment of Alyeska's ROW surveillance and monitoring program would likely include the following steps:

- Identification of the Lease requirements.
- Assessment purpose - usually verification of compliance.
- Assessment scope – will the assessment review the entire surveillance and monitoring program or only a specific portion. The scope will also identify the specific Alyeska facilities, activities, documents and employees included in the assessment.
- Methods – will establish the specific data collection methods, which may include conducting new JPO surveillances, using past JPO monitoring to evaluate compliance trends, interview of Alyeska employees, review of Alyeska documentation, or other appropriate methods.
- Analysis of data – will integrate the available information and evaluate compliance with the requirement.

- Assessment Report – Produce a report summarizing the process, analysis and results of the assessment. The report may also include observations, recommendations or findings.

c. Compliance Monitoring - Reports

The JPO compliance monitoring activities and database of documentation is based on the four categories of reports (results presented from the CMP database are subject to change due to post-report additional input of information):

(1) Surveillances reports. The most basic reporting level of the JPO database, surveillance reports are the form of documentation produced from project monitoring, and from planned and unplanned surveillance monitoring activities. A surveillance report typically contains a checklist of individual elements of a Lease or stipulation requirement, (“attributes”) that are measured or observed, and a written analysis/conclusion of whether each attribute was satisfactory, unsatisfactory (deficiencies identified) or corrected on the spot. Surveillance reports, particularly from an unplanned surveillance, are more likely to identify non-satisfactory conditions, as satisfactory conditions observed outside the scope of a surveillance assignment don’t typically provide a reportable occurrence.

(2) Technical or engineering reports. Similar in scope to surveillances, but used when an analysis requires expert scientific or engineering judgment or other professional opinion. They may include and attach surveillances to document aspects of the issue that are addressable by observation or documentation. Technical and engineering reports often result in issuance of a formal letter to Alyeska requesting development of additional specific technical information, and may thus result in a determination that additional or more extensive study of the issue is required. They can result in JPO’s issuance of a finding (of non-compliance) that compels corrective action by the Lessees if a Lease deficiency is identified.

(3) Assessment reports. Broader in scope than surveillance reports and equivalent to the largest scope technical/engineering reports. Assessments usually consider the results of several surveillances or engineering reports to identify a pattern of compliance deficiencies that are addressed by issuance of formal findings and corrective action expectations by letter to Alyeska. The purpose of assessments is to identify trends in deficiencies.

(4) Comprehensive Monitoring Program (CMP) reports. The broadest scope JPO reports, they are the key scheduled outputs of JPO work plans and are released after completing a periodically defined scope of work. CMP reports summarize JPO work products; functions as an assessment document; and include findings and compliance conclusions. A CMP report is not intended to be a self-auditable document. The specific information and documents used to draw the conclusions in a CMP report are contained in JPO files, individual agency files, subordinate reports, and the CMP database.

This field work results in the substantial JPO substantial JPO reporting effort. In addition to the surveillance and assessment reports that are produced directly from the field work, broader JPO reports are produced to collect and discuss systemic implications of the field reports. The JPO has issued twelve of the broader “Comprehensive Monitoring Reports” since 1997, as referenced in the Table 2. These CMP reports generally reflect the risk management focus of the JPO’s TAPS oversight program. The April 2002 CMP report, which examined Lessees compliance with all lease terms and stipulations regardless of risk potential, was produced to address the ROW Lease renewal requirements expressed in AS 38.35.110, which require compliance with all terms regardless of risk.

Table 2. Reports Issued Under the Comprehensive Monitoring Program

Title	Date	Subject
Management Evaluation of Alyeska Pipeline Service Company Employee Concerns Program and Joint Pipeline Office Oversight	March 1997	A management evaluation of the effectiveness of the Alyeska Employee Concerns Program and oversight by JPO, as well as the JPO's hotline program. The evaluation was conducted from February 3-14, 1997.
Audit Report on Compliance and Effectiveness of Alyeska Pipeline Service Company's Program to Implement the Alaska Native Utilization Agreement of October 20, 1995	September 1997	An audit to (1) determine Alyeska's compliance with Section 29 of the federal Agreement and Grant of Right-of-Way and the Alaska Native Utilization Agreement (Agreement) dated October 20, 1995, (2) assess the effectiveness of Alyeska's efforts to achieve the goals and intent of the Agreement, and (3) identify potential measures to improve Alyeska's performance related to employment, training and education of Alaska Natives.
Alyeska Pipeline Service Company's TAPS Environmental Protection Program	March 1998	A review of Alyeska's environmental performance relative to some significant TAPS environmental issues of potentially high risk to the environment.
Evaluation of Alyeska Pipeline Service Company's TAPS Employee Safety Program	April 1998	An evaluation of Alyeska's Employee Safety Program and examination of selected issues which were considered to be of potentially high risk to personnel.
Evaluation of Alyeska Pipeline Service Company's Project Performance for TAPS	September 1998	An evaluation to address whether Alyeska has implemented TAPS projects in accordance with approved project plans, designs and regulatory requirements based on surveillances and assessments from JPO oversight activities.
Evaluation of Alyeska Pipeline Service Company's Operation of the Trans-Alaska Pipeline System	February 1999	An evaluation of Alyeska's operation of TAPS focusing on activities that were problem orientated, with a heavy emphasis on unscheduled shutdowns and pipeline restarts. Also included were pipeline integrity issues and shutdowns related to communication failures from 1994 through 1998.
An Evaluation of Selected Portions of the TAPS Maintenance Program, January 1997-April 1999	April 1999	An evaluation of Alyeska's maintenance program focusing on six functional areas: electrical, preventive, mainline valve, work pad civil maintenance and surveillance, slope stability, and mineral material sites. The evaluation was a result of JPO surveillances and assessments, and addressed the period from January 1997 through April 1999.
A Look at Alyeska Pipeline Service Company's Operation of the Trans-Alaska Pipeline System, 1999/2000	February 2001	A review of Alyeska's operation of TAPS focusing on follow-up monitoring of issues identified in the February 1999 operations review. The review included the results of two assessments of Alyeska's Risk Management Program and an evaluation of significant operational incidents since the previous review.
TAPS Construction Program, 1999/2000	January 2001	A review of Alyeska's construction program focusing on the document revision process. The effectiveness of this process is integral to closure of Audit Action Item 1955 (one of only two remaining priority one audit items from the 1993 BLM audit of TAPS) as well as compliance to the federal Grant and state Lease requirement for maintenance of current and accurate records.
TAPS Maintenance Program, 1999/2000	January 2001	A review of Alyeska's maintenance program focusing on compliance requirements for maintenance of TAPS and strategies necessary to ensure long-term operational safety and reliability. The long-term viability and useful life of TAPS is directly related to monitoring and resulting maintenance activities.
A Comprehensive Monitoring Program Report Examining Grant & Lease Compliance for the Trans-Alaska Pipeline System	April 2002	A comprehensive examination of Alyeska's compliance with the requirements and stipulations included in the federal Grant and state Lease of Right-of-Way.
TAPS Maintenance & Sustained Useful Life, January 2001	June 2002	A review of Alyeska's maintenance program focusing on the implementation of the Reliability Centered Maintenance (RCM) program for TAPS.

d. Categories of Non-Compliance

“Findings” are the basic level of compliance issues that are formally communicated to Alyeska and require corrective action to JPO’s satisfaction. Findings that deal with issues that fall within the overlapping jurisdiction of another regulatory agency are also referred to the agency for their review and enforcement.

Each compliance problem identified from an individual attribute of a surveillance is designated as an “unsat”. While an individual unsat may be the complete basis for a “finding” and thus for a corrective action order, typically findings are issued as a result of a combination or accumulation of unsats, and some minor unsats are thus simply documented and collected to monitor for possible trends of non-compliance that may rise to the level of a finding.

Finally, in a case where a finding or group of findings evidences a particularly hazardous situation, or if Alyeska is slow to respond to a finding of required corrective action, or responds in a manner that is inadequate to fully correct a serious deficiency, JPO will issue a “notice” or “order” to Alyeska, reflecting a perceived substantial non-compliance with the requirements of the Lease. Notices and orders are primarily issued if Alyeska is slow to respond or its activities are inadequate in correcting serious deficiencies. Since 1999, eight orders and three notices have been issued, and all have resulted in full correction of the compliance issues (see Appendix E, Stipulation 1.21).

e. Field Work Program

The JPO is comprised of staff with technical expertise in land management, engineering, geophysics, fish and wildlife biology, safety codes, electrical codes, fire codes and oil spill planning and response (Appendix B, JPO Organizational Chart).

During state fiscal years 2000 and 2001, JPO staff spent an estimated 1,000 and 1,030 work-days (a field work-day usually averages 10-12 hours per day) in the field, conducting surveillances, project monitoring and general oversight activities. From 1997 through June 2002, a total of 1,273 surveillances, 142 technical or engineering reports, and 65 assessments were performed.

IV. Additional Information Considered

In addition to information generated by state and federal regulatory agencies, the SPCO considers information provided by Alyeska, the Lessees and other sources for the purpose of compliance determination. The SPCO has reviewed, verified, and referenced to the implicated Lease sections, applicable portions of the substantial body of documentation and reports provided to the SPCO through these other sources.

a. Lessees Provided Information

Information from Alyeska's Surveillance and Monitoring Program, Quality Assurance Program, Environmental Program and other operational and maintenance data are provided to the JPO either as a requirement, upon request or as part of compliance monitoring. For example, Alyeska Letter No. 02-18617 transmits the following reports to the JPO as part of the Alyeska Civil and Corrosion Annual Monitoring efforts:

- Rivers and Flood Plain Monitoring
- Fuel Gas Line Corrosion and Stability Monitoring
- Above Ground Monitoring and Maintenance Program
- Fault Monitoring
- Glacier Monitoring
- VMT-Slope Stability Monitoring
- Facility Corrosion and Tank Monitoring
- Mainline Corrosion Investigation and Girth Weld Documentation
- Mainline Corrosion Control
- VMT-Facility Monitoring

The TAPS Owners produced the "Environmental Report for TAPS ROW Renewal" specifically for the TAPS renewal process. The report details the physical, biological, and socio-economic environments and the impacts of ROW renewal on the environment, including cumulative effects. Measures to mitigate the impacts are also described.

In addition, as part of the process for TAPS ROW renewal, Alyeska wanted an independent compliance verification of compliance by a third party. Det Norske Veritas (DNV) agreed to undertake such independent third party verification. The overall findings of that audit were presented in DNV Report Number 10561-A (Certificate Report) Revision 1 dated 30 November 2000.

Alyeska considered the findings contained in the Certificate Report and developed an initial response to address the issues raised. Their initial response is described in Alyeska letter to DNV dated 23 March 2001. DNV undertook a review of the proposed plans in order to determine whether such plans should be able to adequately address the issues raised. This review was presented in DNV Report Number 10561-C (Progress Review Report – March 2001) and concluded that the proposed actions adequately addressed the issues raised in the DNV Certificate Report. In view of this, DNV was then able to reach the following conclusion:

"Subject to the appropriate implementation of the actions proposed in their letter dated 23 March 2001, the management systems of the Alyeska Pipeline Service Company, operator of the Trans Alaska Pipeline System (at 1835 South Bragaw Street, Anchorage, Alaska 99512, USA) incorporate a compliance system which should be capable and effective in ensuring ongoing compliance with the Right of Way requirements, including laws and regulations."

Since issuance of the progress report in March 2001, Alyeska has proceeded to implement their proposed plans. Alyeska has requested that DNV return to review the actual progress made since the plans were originally developed and to offer comment as to ways in which the ongoing activities might be further improved.

The State Pipeline Coordinator, representing the JPO, conducted an audit of DNV's processes and procedures for conducting the verification and the closure of the findings.

The JPO has reviewed each of the twenty-nine elements for its applicability to State Lease and Federal Grant requirements and regulatory compliance issues. The JPO then reviewed the actual or proposed closure action and developed its own determination through document review and in some cases surveillance by JPO staff (Appendix D).

b. Other Sources of Information

The SPCO Information Officer routinely distributes information about the SPCO and JPO activities related to TAPS oversight. Because of the multiple state and federal agency responsibilities related to TAPS, there is strong interest in the work the JPO performs within the state, nationally, and internationally and the hundreds of annual media interviews, news stories, and requests and exchanges of information clearly reflect this intense interest. The Information Officer, representing the SPCO and JPO, engages the public, industry, stakeholders, agencies, and special interests to participate in two-way communications. Information is distributed to the public in many forms including the following:

- JPO weekly reports, incident press releases, position papers, and JPO briefing slides.
- Through television, radio, and print media.
- The annual JPO report.
- Individual meetings with representatives of environmental and other special interest groups.
- Individual response to public and professional inquiries.
- The JPO web site.

Typically, distribution of this information results in feedback from other agencies, special interest groups and interested individuals. This feedback is discussed and acted upon, if appropriate.

The JPO also receives public feedback through audits such as the Government Accounting Office audit and the Department of Interiors Inspector Generals audit referenced in Appendix A.

In addition, the JPO Executive Council was established in 1994. The Council is comprised of the heads of participating JPO agencies with representatives from the Governor's Office and the Attorney General's Office. The Council provides guidance to the JPO. Meetings generally consist of staff briefings to apprise members of items of

concern related to oversight of TAPS activities and lay out plans for consideration and approval. The Executive Council meetings are noticed and open to the public.

V. State Right-of-Way Lease and Applicable Laws

The Right-of-Way Lease between the State and the Lessees covers a wide range of activities and governs the conduct between the parties. The Lease covers the full life of the pipeline; construction, operations, maintenance, and termination. The underlying theme throughout the Lease is protection of human health, safety and the environment, established by safe pipeline operations and mitigation of environmental impacts.

The Lease is structured to address these themes. The Lease sections cover several general terms, most of them legal or administrative. The terms are both substantive and procedural, and govern the relationship and interaction between the State and the Lessees.

The Lease incorporates a comprehensive set of stipulations that impose substantive environmental and technical conditions on the Lessees, to assure that the pipeline activities are conducted in a safe manner, that complies with the Lease, as well as applicable laws and regulations. The stipulations also require the Lessees to establish processes, programs and systems for pipeline operations. The implementation of these programs and systems helps to insure the integrity of the pipeline and the pipeline operations.

In many areas the Lease overlaps with State and Federal laws and regulations. Notable areas are public safety, worker safety, common carrier transportation, taxation, and environmental compliance. Some of these laws and regulations were in place when the Lease was executed. Some legislation was enacted after. In areas where statutory or regulatory authority overlaps with the Lease, the State Pipeline Coordinator relies on the agency enforcement determinations for Lease compliance. In those instances, the State Pipeline Coordinator coordinates with the agencies for the oversight of the pipeline and right-of-way management (Appendix C).

a. Sections and Stipulations

The Lease is a contract between the State of Alaska and the Lessees. The Lease is comprised of 42 Sections and exhibits A through D. Exhibit A contains Lease stipulations⁴ in three distinct categories, General, Environmental, and Technical. These stipulations impose additional requirements upon the Lessees for the establishment of specific programs, plans, or processes to ensure safety and environmental protection throughout all phases of pipeline operations.

⁴ Exhibit B is an alignment of the location of the proposed centerline of the line of pipe and the location of related facilities. Exhibit C is the general route on state lands of the right-of-way for the line of pipe. Exhibit D is the description of right-of-way for related facilities. While useful during pipeline construction activities, discussion of these Lease exhibits is not directly relevant to these Lease renewal discussions.

During 2001 and 2002, JPO is reviewing Alyeska's compliance with the sections and stipulations of the Lease. JPO staff has and continue to conduct surveillances or assessments to determine whether the Lessees are in compliance with each Lease section and stipulation. The surveillance or assessment included field investigation, records searches, review of processes and procedures, or a combination of all. The results of these activities for Lease compliance are discussed in detail in Attachment 1.

b. State Laws and Regulations

In addition to requiring compliance with the terms of the Lease, AS 38.35.110 also requires that the Lessees be in full compliance with all state laws. To determine full compliance with all state law, the State Pipeline Coordinator coordinated with each state resource and regulatory agency that have oversight, compliance, or enforcement powers over pipeline or right-of-way activities. Below is a discussion of these state agencies and their respective authority. A discussion of the coordination activities and methodologies used by the State Pipeline Coordinator with the respective regulatory agencies is provided in Section III, and a discussion the specific findings of the respective agencies concerning compliance is provided in Section VI b.

c. State Agencies and Their Authorities

Oversight of TAPS is accomplished by state and federal agencies that share regulatory or management responsibilities related to oil and gas pipelines. Coordination with these agencies is accomplished through the use of Reimbursable Services Agreements (RSA). The State Pipeline Coordinator has requested, through an RSA, each agency to provide a report regarding the Lessees compliance with all laws and regulations for which that agency is responsible. The RSA reports are used by the State Pipeline Coordinator in the Lease renewal process both to determine Lessees compliance with state laws and regulations and, where applicable, to determine Lessees compliance with Lease terms and stipulations that include requirements that overlap with state regulatory requirements.

Each agency agreed to report information about any agency actions involving the Lessees such as: civil and criminal proceedings, Notices of Violations, compliance orders, and instances of noncompliance, which did not result in formal action and any ongoing investigations which may result in criminal or civil proceedings, Notices of Violation or compliance orders if that information will not compromise an investigation (reference agency records). Each agency also agreed to report any other information, which the agency believes that the DNR Commissioner should include in the Commissioner's Determination.

The DNR manages all state owned land, water and natural resources (except fish and game) for the State of Alaska. DNR, through the State Pipeline Coordinator located in the Joint Pipeline Office, coordinates state management concerns for state right-of-way leases issued under AS 38.35. The State Pipeline Coordinator coordinates permit issuance and monitoring of preconstruction, construction, operation, maintenance, and termination of common carrier pipeline activities with affected agencies.

The Alaska Department of Environmental Conservation (ADEC) has primary responsibility for the adoption and enforcement of regulations setting standards for the prevention and abatement of all water, land, subsurface land, and air pollution. ADEC regulates facilities and issues permits to protect human health and the environment. The ADEC administers AS Title 46, and evaluates potential impacts related to air and water quality, oil and hazardous substances discharge prevention and response, hazardous materials management, and sanitation and waste management.

The Alaska Department of Fish and Game (ADF&G) regulates activities affecting fish passage, anadromous fish streams, and hazing of wildlife in connection with oil spills. The ADF&G administers AS Title 16 and evaluates potential impacts on fish and wildlife, their habitat, and subsistence harvests.

The Alaska Department of Transportation and Public Facilities (ADOT/PF) designs, constructs, operates, and maintains state transportation systems, buildings, and other facilities. The ADOT/PF administers AS Title 19 and evaluates potential impacts on state transportation systems and facilities.

The Alaska Department of Labor and Workplace Development (ADLWD) aims to protect workers by reviewing practices and procedures pertaining to occupational safety and health; mechanical, electrical and pressure systems; and wage and hour codes. The ADLWD administers AS Title 23 and evaluates projects for impacts relating to occupational safety and health for protection of employees.

The Division of Governmental Coordination (DGC) coordinates review of projects under the Alaska Coastal Management Program and consolidates state comments on national Environmental Policy Act (NEPA) issues. The DGC administers AS 46.40, coordinates coastal consistency reviews on North Slope projects and makes appropriate consistency determinations.

The Regulatory Commission of Alaska (RCA) regulates public utilities by certifying qualified providers of the public utility and pipeline services; and ensuring that they provide safe and adequate services at just and reasonable rates, terms and conditions. The RCA administers AS 42.06 (the "Pipeline Act"), and regulates intrastate oil pipeline carriers under these statutes. An entity may not construct or operate an intrastate oil pipeline until it has obtained a certificate of public convenience and necessity from the RCA. The Alaska Pipeline Commission (predecessor of the RCA) approved the certificate of public convenience and necessity to Alyeska Pipeline Service Company to operate a common carrier pipeline from Pump Station 1 to the Valdez Marine Terminal (VMT). In addition, the RCA annually reviews the pipeline operations for compliance with public utility statutes and regulations.

The Alaska Department of Revenue (DOR) administers AS Title 43, and regulates revenue and taxation issues associated with oil and gas development and transportation in Alaska.

The Alaska Department of Public Safety, Division of Fire Prevention (DPS) regulates fire prevention and protection systems along the pipeline and conducts inspections to assure that the systems meet the applicable requirements. DPS administers AS 18.70.

The Alaska Department of Law (DOL) provides legal services to all state agencies and is responsible for prosecuting violations of state laws. The DOL has reviewed the Lease renewal application and related documents, and provides the State legal advice on the application.

d. Federal Laws and Regulations

The U.S. Department of Transportation, Office of Pipeline Safety (OPS) regulates the design, construction, operation, maintenance, and transportation by pipeline of hazardous liquids and gases (49 C.F.R. §192 and 49 C.F.R. §195), as well as conducts annual inspections. The OPS actively monitors construction, operation and maintenance of North Slope pipelines.

The U.S. Environmental Protection Agency (EPA) works to administer environmental regulatory programs such as the Clean Air Act, the Clean Water Act, and the Resource and Conservation Recovery Act. The EPA provides oversight that requires pipeline operations to meet federal environmental laws and regulations.

The U.S. Army Corps of Engineers (COE) is responsible for providing comprehensive engineering, management and technical support for the protection of the nation's waterways and wetlands, and reviews project proposal and applications for potential impacts to waterways and wetlands.

VI. State Compliance Review

As discussed in Section I above, AS 38.35.110 and Section 2 of the Lease outline the requirements for renewal. The following three subsections summarize the SPCO compliance analysis for each requirement based on the administrative record (11 AAC 80.075(b)).

a. Commercial Operation

For Lease renewal, both the statute (AS 38.35.110) and the Lease (Section 4), require the Lessees to be in “commercial operation.” The Lessees operate under a valid “Certificate of Convenience and Necessity” issued to each Lessee by the Alaska Public Utilities Commission (predecessor to the RCA).⁵ Each Lessee has a current Alaska Business

⁵ A further argument for establishing “commercial operation” could be made by reference to the “abandonment” statute under the Pipeline Act, AS 42.06.290. This statute requires permission and approval from the RCA before a pipeline carrier operating under a Certificate of Convenience and Necessity may discontinue service. There are no requests, notices, hearings, or orders concerning TAPS Right-of-Way Lease
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License, and Alyeska holds a Certificate of Compliance, authorizing them to transact business in Alaska. They have an approved tariff and the pipeline transports oil every day. State resource and regulatory agencies receive daily, monthly and yearly production and transportation figures for the volume of oil that is transported through TAPS. The Lessee pays state and local property taxes related to the TAPS. Considering all the above, the Lessee is in commercial operation.

b. Compliance with State Laws

Both the statute and the Lease require the Lessees to be in full compliance with State law. In this renewal review effort, “compliance with state law” is being determined based upon a report produced by each state regulatory agency that administers a statute or regulation that applies to the Lease. The State Pipeline Coordinator has entered into reimbursable service agreements (RSAs) through which each regulatory agency has accepted responsibility to analyze its regulatory program for application to Lessees and to issue a compliance determination. The reports, including compliance determinations, of each regulatory agency are included in Attachment 2 to this report. A brief summary of what each state agency reported follows:

Department of Public Safety reported that Alyeska is currently in compliance with State laws, regulations and those portions of the right-of-way Lease covered by the Department of Public Safety. Fire Prevention inspections conducted in 2000 and 2001 identified violations of State fire law. These violations are being corrected within the timeframe established by the Fire Marshal’s office. With the ongoing inspection program, there will be some violations open at almost any given time.

Department of Labor and Workforce Development reported no civil proceedings, criminal proceedings, notice of violations, or instances of noncompliance. Although at any given time there could be an average of ten open notices of violation issued to Alyeska or its contractors.

Department of Revenue reported there are no tax compliance matters that should adversely affect the TAPS Lease renewal determination and are in full compliance with the tax laws. This does not mean that the State is in agreement that all taxes, interest and/or penalties owed have been paid. Additionally, taxpayers are entitled to dispute tax and penalty assessments, and the exercise of their appeal rights does not constitute non-compliance with tax laws.

Department of Fish and Game reported no outstanding (or open) findings associated with Alaska Statute 16.05.0840 or Alaska Statute 16.05.870.

Department of Environmental Conservation reported no active enforcement-related correction action plans and no investigations involving Alyeska at the time of their report in January 2002.

abandonment of TAPS. If there are no issues of abandonment, then the Pipeline must be deemed in commercial operation.

The Regulatory Commission of Alaska reported no findings of any violation of AS 42.06 by the TAPS carriers for the period 1999 to 2001.

Department of Natural Resources, Office of History and Archaeology reports that Alyeska has not requested a state archaeology permit and there are no compliance issues at this time.

c. Compliance with the Lease

The JPO review of the Lessees compliance with all terms of the Lease is set out in Appendix F. That report contains a stipulation by stipulation review and cites to the specific evidence or documentation that is the basis for a determination of compliance with each stipulation. The JPO has found three primary sources of that documentation regarding compliance with the terms of the Lease:

(1) State agency reports. As discussed above, the State Pipeline Coordinator has requested and received reports from each state regulatory agency regarding the Lessees compliance with all laws and regulations for which that agency is responsible. In some areas, the requirements of those regulatory programs overlap the requirements of certain terms and stipulations of the Lease. The regulatory agencies' monitoring programs and determinations of regulatory compliance thus also provide the basis to determine that the Lessees are in compliance with overlapped terms and stipulations of the Lease.

(2) CMP database. The SPCO then reviewed all in-house documentation of SPCO monitoring and oversight (Comprehensive Monitoring Program) from 1997 to date and cross-referenced each surveillance, assessment and other reports to the affected Lease terms and stipulations. The regular JPO monitoring program provides a complete overview of Lease compliance within the focus of the Risk Management Analysis that the JPO uses for its primary oversight planning.

(3) Supplemental monitoring. When some low-risk Lease requirements were found to have limited compliance documentation in the database due to the risk-based focus of the CMP process, additional surveillance was added to the 2001 and 2002 workplans, resulting in supplemental compliance reports.

The final section by section and stipulation by stipulation compliance determinations, based on agency reports of SPCO review, are presented in Appendix E. In summary, the State Pipeline Coordinator finds that there are no open issues of substantial non-compliance with the terms and conditions of the Lease.

VII. Recommendations

The Lessees applied for renewal of the State Right-of-Way Lease for the Trans-Alaska Pipeline and related facilities on May 2, 2001. The TAPS has been in continuous

commercial operation since July 1977, and the owners requested that the existing State Right-of-Way Lease be extended for an additional 30 years.

1. Based on a comprehensive consideration of the requirements for renewal of the State Right-of-Way Lease, and review of the documentation of compliance oversight by the SPCO and other state regulatory agencies, the State Pipeline Coordinator finds no legal or regulatory basis not to renew the State Right-of-Way Lease for TAPS. The TAPS is in compliance with the sections and general, technical and environmental stipulations in the State Right-of-Way Lease and all other relevant state laws and regulations. The Lessees have met the requirements for renewal of this Right-of-Way Lease as specified in statute and regulation. The Lessees have the technical and financial capability to operate, maintain, and terminate the project in an appropriate manner consistent with applicable requirements, and renewal is considered to be in the best interest of the state.

Based on the administrative record developed to date pertaining to ADL 63574, the Lessees are in commercial operation, are in full compliance with all state law, and are in compliance with all terms of the Lease. Pursuant to the provisions of AS 38.35.110 and Section 2 of the Lease, the Lease should be renewed.

2. As noted in Section 2c, the State Right-of-Way Lease shall be renewed for additional periods up to 30 years each. In preparing my recommendation pertaining to the duration of the Lease renewal, factors considered included the cost of the facility, its useful life, any public purpose it serves, and potentially conflicting uses of the land. The Lessees have requested that the Right-of-Way Lease be renewed for an additional 30 years.

The Lessees have invested a significant amount of resources in this venture. The cost to construct TAPS was \$8 billion (1977 dollars) and more than \$2.5 billion has been spent on upgrade and improvement projects since 1987. The annual cost to operate and maintain these facilities over the last ten years has been about \$500 million. The physical life of TAPS can be sustained for an unlimited duration (CMP Report No. 12 “TAPS Maintenance & Sustained Useful Life”, June 2002). The Lessees have sufficient technical and financial capability to correct unforeseen problems, and have made all necessary upgrades and modifications as identified by JPO. Current estimates indicate that there is sufficient North Slope crude oil to support operation of TAPS for at least 30 years.

There are a number of public purposes served including the economic benefits to the country and state of Alaska from the jobs and tax revenues generated by the operation of TAPS. The TAPS is an important component of the infrastructure necessary for future development of North Slope oil reserves, and improves national security by making petroleum products available to the military and reducing dependency on imported oil.

Based on the administrative record developed to date pertaining to ADL 63574 the State Pipeline Coordinator has found no reason to constrain the duration of the renewal to a period of less than 30 years.

VIII. Literature Cited

A detailed bibliography of literature cited in this report is contained in Appendix E.

John Kerrigan, State Pipeline Coordinator
Alaska Department of Natural Resources

Date

ATTACHMENT 1

COMPLIANCE ASSESSMENT OF LEASE SECTIONS AND STIPULATIONS

SECTION 1 GRANT OF RIGHT-OF-WAY

a. Pursuant to the provisions of AS 38.35, the Alaska Right-of-Way Leasing Act, as amended, and for and in consideration of the annual rental fee prescribed in Section 3 hereof and the covenants herein contained to be kept and performed on the part of the Lessees and subject to the conditions and requirements herein contained, the State hereby grants to the Original Lessees, for the period of limited duration prescribed in Section 2 hereof and for the purpose prescribed in Subsection "c" of this section, a right-of-way (hereinafter referred to as the "Right-of-Way") for a pipeline with its Related Facilities (such pipeline and Related Facilities being hereinafter referred to as the "Pipeline"), the width and location thereof being subject to the provisions of Subsection "d" hereof, across, through and upon State land now owned or hereafter acquired (hereinafter sometimes referred to as "State Land"), along the General Route of the Pipeline shown in the application and accompanying alignment and Related Facility site location drawings referred to in Exhibit "B" hereof. The grant made hereby is of the following undivided interests in and to the Right-of-Way to the companies designated:

Amerada Hess Corporation, an undivided
interest of 3.00% of the whole;
ARCO Pipe Line Company, an undivided
interest of 28.08% of the whole;
Exxon Pipeline Company, an undivided
interest of 25.52% of the whole;
Mobil Alaska Pipeline Company, an
undivided interest of 8.68% of the whole;
Phillips Petroleum Company, an undivided
interest of 3.32% of the whole;
Sohio Pipe Line Company, an undivided
interest of 28.08% of the whole;
Union Alaska Pipeline Company, an undivided
interest of 3.32% of the whole.

b. This grant is made subject to (i) all applicable laws and regulations of the State of Alaska and (ii) any valid existing rights in the lands subject to the Right-of-Way.

c. The Right-of-Way is granted for the purpose of the construction, operation, maintenance and termination of one (1) Oil transportation pipeline, consisting of one (1) line of forty-eight (48) - inch -diameter pipe and its Related Facilities. Lessees shall not use the Right-of-Way or the land subject thereto for any other purpose and shall not locate construct any other pipelines (including looping lines) or other improvements within the Right-of-Way without prior written approval of the Commissioner. The Pipeline shall be used for only the transportation of Oil, and it shall not be used for any other purpose without the prior written approval of the Commissioner. Each Lessee shall not allow or suffer any person or business entity, with the exception of the other Lessees under this Lease, to use the Right-of-Way for the purpose set forth in this section. Nothing in this subsection is intended to (i) excuse or preclude Lessees from complying with their obligations under Section 4 of this Lease, or (ii) preclude Lessees from

employing agents or contractors to effect construction, operation, maintenance or termination of all or any part of the Pipeline.

d. (i) During construction of the Pipeline and prior to the execution of the release of interests in the Right-of-Way provided for in paragraph B of this subsection, the width of the Right-of-Way shall be 400 feet, except (1) that in locations where the line of pipe is to enter or cross any river bed or flood plain, the width of the Right-of-way shall be 600 feet within an area bounded by parallel lines on each side of and 1,000 feet from the centerline of the particular river, and (2) that the dimensions of the Right-of-Way for Related Facilities shall be those more particularly set forth in Exhibit "D" hereof.

(ii) After completion of construction of the Pipeline within a particular Mapping Segment, the land subject to the Right-of-Way shall be (1) 400 feet in width along the line of pipe across State Land, except that in locations where the pipeline of pipe enters or crosses any river, river bed or flood plain, the width of the Right-of-Way shall be 600 feet in width within an area bounded by parallel lines on each side of and 1,000 feet from the centerline of the particular river, the centerline of the pipe being also the centerline of the 400 and 600 foot Rights-of-Way, and (2) the sites for Related Facilities described in Exhibit "D." Within 360 days following the Commissioning of the Pipeline, Lessees shall execute and deliver to the State a release of all interest in such portions of the Right-of-Way as will result in Lessees retaining only (1) the Right-of-Way for Related Facilities described in Exhibit "D," and (2) the Right-of-Way not exceeding 100 feet in width along the line of pipe with the centerline of the line of pipe being the centerline of the Right-of-Way, except that at such locations where Lessees have requested authority from the Commissioner to retain a wider Right-of-Way and the Commissioner has found and recorded the reasons for his finding that in his judgment a wider Right-of-Way is necessary for the operation and maintenance of the Pipeline after construction, or that a wider Right-of-Way is necessary to protect the environment or public safety, the width of the Right-of-Way which Lessees retain may exceed 100 feet in width in accordance with the Commissioner's finding.

e. Upon the release required by Subsection "d" of this section, Lessees shall survey and provide adequate monumentation as the Commissioner may require to locate and describe the Right-of-Way and the Lessees shall file: (i) Proof of construction of the Pipeline in accordance with the provisions of this Lease and the applicable regulations of the Department of Natural Resources; and (ii) a map, or maps or survey, approved by the Commissioner, showing the final "as built" location of the completed Pipeline, including the final locations of all buried and above-ground improvements, the centerline of the Right-of State Right-of-Way Lease Section 4, Common Carrier -Way, as definitely located, and, referenced to the centerline, the boundaries of the Right-of-Way, as definitely located.

f. All construction activities within the Right-of-Way shall be limited to a construction zone approved by the Pipeline Coordinator in the applicable Notice to Proceed.

Scope

These are legal/administrative provisions that apply during all phases of pipeline activities but do not require continuous compliance monitoring or surveillance. Subsections (d) and (f) apply during the construction phase.

Summary

The Lessee applied for and was issued a right-of-way lease under the ADNRL leasing process. All construction activities were approved prior to commencement of construction activities. The department approves surveys. A Notice to Proceed (NTP) is required pursuant to Stipulation 1.7 prior to the initiation of construction activities.

Compliance

JPO Surveillance Report, ANC-02-S-023 and JPO Assessment Report, ANC-02-A-006, verified compliance with Subsections 1C, 1E, and 1F. Subsections 1A, 1B, 1E and 1F are legal and administrative provisions that do not require active continuous compliance monitoring or surveillance. Subsection C requires periodic compliance monitoring to ensure Lessees are using the Pipeline solely for the transportation of oil. The Subsection D requirement was amended and fulfilled after initial pipeline construction.

There are no compliance issues relating to Section 1.

SECTION 2 DURATION OF RIGHT-OF-WAY GRANT

- a. The grant hereby made of the Right-of-Way shall come to an end and expire on the 2nd day of May, 2004, at 12 noon, (Alaska Standard Time) unless prior thereto it is released, abandoned, or otherwise terminated pursuant to the provisions of this Lease or of any applicable law or regulation.*
- b. Upon the expiration of the initial or any subsequent grant of the Right-of-Way, or its earlier relinquishment, abandonment, or other termination, the provisions of this Lease, to the extent applicable, shall continue in effect and shall be binding on the parties hereto, their successors or assigns, until they have fully performed their respective obligations and liabilities accruing before or on account of the expiration, or the prior termination, of the grant.*
- c. The Commissioner shall renew the Lease for additional periods up to ten years each, so long as the Pipeline is in commercial operation and the Lessees are in full compliance with State law, including but not limited to State law pertaining to regulation and taxation of the Pipeline.*
- d. Any subsequent conveyance, transfer or other disposition of any right, title, or interest in the State and or any part thereof, burdened by and subservient to this Lease, shall, to the extent allowed by law, be subject to the Right of-Way and the provisions of this Lease, including Lessees' right to renew the Lease under Subsection "c" of this section.*

Scope

These are legal/administrative provisions that apply during all phases of pipeline activities but do not require continuous compliance monitoring or surveillance.

Summary

The Lessee submitted an application for renewal on May 2, 2001. The renewal application included the pipeline right-of-way and all related facilities. JPO has reviewed

the renewal application, along with other records, pursuant to the requirements of AS 38.35 to determine whether the lessee is in full compliance with this section.

Compliance

JPO Assessment Report, ANC-02-A-006 concludes there are no compliance issues relating to Section 2.

SECTION 3 RENTAL

- a. Lessees shall pay to the State, annually and in advance, the fair market retail value of the Right-of-Way based on the appraised fair market value of the land.*
- b. The initial charge for the first year's rental shall be One Hundred Forty-One Thousand Two Hundred Twenty-Five Dollars (\$141,225.00); however, this amount shall be adjusted based on a formal appraisal conducted before January 1, 1975.*
- c. The annual rental payment is subject to adjustment at five-year intervals and charges or adjustments shall be the reappraised fair market rental value of the land.*
- d. Rental shall not be charged for any land acquired under AS 38.35.130 and conveyed without cost to the State.*
- e. For the year in which portions of the Right-of-Way are released to the State pursuant to Section 1, Subsection "d" paragraph (ii) hereof, the State shall credit Lessees against the payment of future rental for a portion of the rental paid to the State for that year, the amount of the credit to be the portion of rental paid for that year attributable to the lands so reconveyed to the State reduced pro rata by the portion of the lease year which had elapsed prior to the reconveyance.*

Scope

This is a legal/administrative provision that applies throughout the term of the lease. This provision applies through the entire term of the lease and any additional time required for the removal of all improvements.

Summary

This section establishes the initial rental for the right-of-way, identifies when the first appraisal will be conducted, and identifies that reappraisal will be conducted every 5 years to establish the fair market rental value of the land. Annual rent shall be paid prior to the anniversary date of the lease. Review of the Department of Natural Resources Revenue and Billing records show the Lessee has made timely payments of the annual rental.

Compliance

JPO Assessment Report, ANC-02-A-006 and JPO Surveillance Report, ANC-02-S-024, found the Lessee has made timely payments of the annual rental. Reappraisal is done every 5 years. The Lessee is working with the ADNRR and the Bureau of Land Management in developing a common appraisal methodology for future TAPS Right-of-Way appraisal, to minimize or avoid the potential for conflicts. There are no compliance issues relating to Section 3.

SECTION 4 COMMON CARRIER

Each Lessee shall assume the status and perform all of its functions undertaken under the Lease as a common carrier and accept, convey and transport without discrimination, crude oil delivered to it for transportation from fields in the vicinity of the Pipeline subject to the Lease throughout its route, both on State Land obtained under the Lease and on other land; Lessee shall accept, convey and transport crude oil without unjust or unreasonable discrimination in favor of one producer or person, including itself, as against another, but will take the crude oil delivered or offered, without unreasonable discrimination, that the Alaska Pipeline Commission shall, after a full hearing with due notice to, the interested parties and a proper finding of facts, determine to be reasonable in the performance of its duties as a common carrier.

Scope

This provision applies during all phases of TAPS.

Summary

The lessee has maintained the common carrier status and the certificate from the Regulatory Commission of Alaska, formerly named the Alaska Public Utilities Commission. The State Pipeline Coordinator views any violation of Federal Energy Regulatory Commission or RCA certificates as adversely affecting the public interest.

Compliance

JPO Assessment Report, ANC-02-A-006, and JPO Surveillance Report, ANC-02-S-025, documented that the Regulatory Commission of Alaska reviewed its records for the period 1999 to present and had no finding of any violation of Alaska Statute 42.06 by the TAPS Carriers during that period. There are Lessee is in compliance with Section 4.

SECTION 5 INTERCHANGE OF OIL

Lessees agree to interchange crude oil with each like common carrier and provide connections and facilities for the interchange of crude oil at every locality reached by both pipelines when the necessity exists, subject to rates and regulations made by the appropriate State or federal regulatory agency.

Scope

This is provision applies during the entire operational life of the Pipeline.

Summary

The Regulatory Commission of Alaska (RCA) administers Alaska Statute 42.06, The Pipeline Act. The Act grants the RCA regulatory authority over pipelines and pipeline carriers in the state. The RCA submitted a November 19, 2001 report for the Trans-Alaska Pipeline System that documents no findings of any violation of 42.06 by the TAPS Carriers from 1999 to the date of issuance of the report. The RCA Annual Reports from 1997 to 2000 reveals no issues before the RCA concerning interchange issues. A review of State JPO records shows no issues arising concerning the interchange of oil.

This section requires verification of compliance with the Regulatory Commission of Alaska and the Federal Energy Regulatory Commission.

Compliance

JPO Assessment Report, ANC-02-A-006, and JPO Surveillance Report, ANC-02-S-026, concluded there are no compliance issues relating to Section 5.

SECTION 6 BOOKS, ACCOUNTS AND RECORDS; ACCESS TO PROPERTY AND RECORDS

a. Each Lessee shall maintain and preserve books, accounts and records and make those reports that the State may prescribe by regulation or law as necessary and appropriate for the purposes of administering AS 38.35. Each Lessee shall accord at all reasonable times to the State and its authorized agents and auditors the right of access to its property and records, of inspection of its property, and of examination and copying of such records.

b. Each Lessee agrees that it shall submit to the Commissioner or the Pipeline Coordinator, on request, any information or documents or other materials which are submitted to the Secretary of the Interior or to the Authorized Officer under the Agreement and Grant of Right-of-Way for the Trans-Alaska Pipeline between the United States and the Lessees and which are relevant to the enforcement of the rights of the State under this Lease.

Scope

This section applies during the entire operational life of the Pipeline.

Summary

Compliance with these requirements is accomplished through continuous monitoring to verify that the Lessees do not deny access to any records or documents when requested by State of Alaska staff and representatives. There are no outstanding unfulfilled requests to access documents.

Compliance

Failure to comply with this Section is further addressed in Section 19(b) and Section 16(c) and Stipulations 1.2.3, 1.5.2, 1.18.3, and 4.1.1. JPO Assessment Report, ANC-02-A-006, and JPO Surveillance Report, ANC-02-S-027, concluded there are no outstanding unfulfilled requests to access documents. There are no compliance issues relating to Section 6.

SECTION 7 CONNECTIONS FOR DELIVERY

Lessees shall provide connections, as determined by the Alaska Pipeline Commission, under AS 42.06.340, to facilities on the Pipeline subject to the Lease, both on State Land and on other land in the State, for the purpose of delivering crude oil to

persons (including the State and its political subdivisions) contracting for the purchase at wholesale of crude oil transported by the Pipeline when required by the public interest.

Scope

This provision applies during the entire operational life of the Pipeline.

Summary

This section specifies the lessees shall comply with all orders of the Regulatory Commission of Alaska (RCA) related to the connection for delivery. The Alaska Pipeline Commission is now the RCA. State JPO records show no pending issues arising concerning connections for the delivery of oil.

Conclusion

JPO Assessment Report, ANC-02-A-006, and JPO Surveillance Report, ANC-02-S-028, documented that a review of State JPO records shows no pending issues arising concerning connections for the delivery of oil. There are no compliance issues relating to Section 7.

SECTION 8 CONNECTIONS FOR STATE-OWNED OIL

Lessees shall, notwithstanding any other provisions, provide connections and interchange facilities at State expense at such places the State considers necessary, if the State determines to take a portion of its royalty or taxes in oil.

Scope

This provision applies during the entire operational life of the Pipeline.

Summary

The State has the right to request connections or interchange facilities to take a portion of its royalty or taxes in oil.

Conclusion

JPO Assessment Report, ANC-02-A-006, and JPO Surveillance Report, ANC-02-S-029, found the State has not requested connections or interchange facilities to take a portion of its royalty or taxes in oil. There are no compliance issues relating to Section 8.

**SECTION 9 COMPLIANCE WITH STATE LAWS AND WITH REGULATIONS
AND ORDERS OF THE ALASKA PIPELINE COMMISSION**

Lessees shall construct and operate the Pipeline in accordance with applicable State laws and lawful regulations and orders of the Alaska Pipeline Commission.

Scope

This is provisions applies during all phases.

Summary

This section requires the lessee to comply with all State laws and lawful regulations and orders of the Regulatory Commission of Alaska.

The Regulatory Commission of Alaska, formerly named The Alaska Pipeline Commission, reported there were no findings of any violation of AS 42.06 by the Lessee.

The Department of Environmental Conservation did not have any active enforcement related corrective action plans or investigations against Alyeska.

The Environmental Protection Agency (EPA) did not have any outstanding compliance issues relative to Alyeska.

The Department of Public Safety, Division of Fire Prevention is working on their compliance report.

The Alaska Department of Fish and Game did not have any outstanding issues related to the State Lease.

The Alaska Department of Labor, (Administrative Services Division, Labor Standards and Safety Division, Occupational Safety and Health Section, Wage and Hour Section Vocational Rehabilitation Division, and Workers Compensation Division) did not have any outstanding issues relating to the Lease.

The Alaska Department of Natural Resources did not have any outstanding compliance issues relative to Alyeska.

The Division of Governmental Coordination is working on a compliance report.

Alaska Department of Transportation and Public Facilities is working on their compliance report.

Compliance

JPO Assessment Report, ANC-02-A-006, and JPO Surveillance Report, ANC-02-S-030, verified the statements of compliance from other agencies concluded there are no compliance issues relating to Section 9.

SECTION 10 DAMAGE OR DESTRUCTION OF LEASEHOLD OR OTHER PROPERTY

Lessees shall, at their own expense, during the term of this Lease:

- a. *Maintain the leasehold and Pipeline in good repair;*
- b. *Promptly repair or remedy any damage to the leasehold; and*
- c. *Promptly compensate for any damage to or destruction of property for which the Lessees are liable resulting from damage to or destruction of the leasehold or Pipeline.*

Scope

This section applies during all phases and all of TAPS.

Summary

This provision is a mandatory covenant of all pipeline right-of-way leases pursuant to Alaska Statute 38.35.120(a)(8). The lessees obligations under subsections (a) and (b) are continuous as set out in JPO Letter #01-111-DG, dated June 18, 2001. Obligations under subsection (c) shall be determined by agreement between the parties or a court of competent jurisdiction. This section also applies to those lands acquired under 38.35.130.

Compliance

The following sections and stipulations also apply to this section: Section 22 and Stipulations 1.2.3, 1.5.2, Section 16c(i) and Stipulation 1.18.1. There are no outstanding orders under this Section as of March 13, 2002. JPO Assessment Report, ANC-02-A-006, concludes there are no compliance issues relating to Section 10.

SECTION 11 TRANSFER, ASSIGNMENT, OR OTHER DISPOSITION

a. *Lessees shall not transfer, assign, or dispose of in any manner, directly or indirectly, or by transfer of control of the carrier corporation, their interest in this Lease, any rights under this Lease or the Pipeline subject to this Lease to any person other than another Owner of the Pipeline (including Subsidiaries, Parents and Affiliates of the Owners), except to the extent that the Commissioner, after consideration of the protection of the public interest (including whether the proposed transferee is fit, willing and able to perform the transportation or other acts proposed in a manner that will reasonably protect the lives, property and general welfare of the people of Alaska), authorizes. The Commissioner shall not unreasonably withhold his consent to the transfer, assignment or disposal.*

b. *A Lessee transferring in whole or in part its right, title and interest in the Right-of-Way and this Lease shall be released from its liabilities and obligations (accrued, contingent or otherwise) to the State under this Lease to the extent and limit that the transferee assumes unconditionally the performance and observance of each such liability and obligation; provided, that if such transferee is any person other than another Owner of the Pipeline, a Lessee and/or its guarantor or guarantors shall be released from its and/or their liabilities and obligations to the State under this Lease to the extent and limit assumed by the transferee in a transfer authorized by the Commissioner under Subsection "a" of this section.*

Scope

This section applies for the entire term of the lease. Section 11B is a legal/administrative provision that applies throughout the term of the lease.

Summary

The State Pipeline Coordinator has been delegated the authority to review and approve transfers, assignment and dispositions of interest in the Lease for the TAPS. Lessees must

acquire prior consent and authorization from the Commissioner to transfer, assign or dispose of any interest or rights in the Lease other than to another owner of the Pipeline. The transfer from Mobil Alaska Pipeline Company to Williams Alaska Pipeline Company, L.L.C. was approved.

Compliance

JPO Assessment Report, ANC-02-A-006, and JPO Surveillance Report, ANC-02-S-031, concluded the JPO verified all Lessees are in full compliance with both section requirements of Section 11. There are no compliance issues relating to Section 11.

SECTION 12 APPOINTMENT OF AGENT FOR SERVICE OF PROCESS

Lessees shall file with the Commissioner a written appointment of a named permanent resident of the State to be their registered agent in the State and to receive service of notices, regulations, decisions and orders of the Commissioner; if any Lessee fails to appoint an agent for service, service may be made upon that Lessee by posting a copy in the office of the Commissioner and filing a copy of it in the office of the Lieutenant Governor and by mailing a copy to the Lessee's last known address.

Scope

This is a legal/administrative provision that applies throughout the term of the lease.

Summary

Lessees have appointed Alyeska Pipeline Service Company as their agent for operation and maintenance of TAPS.

Compliance

JPO Assessment Report, ANC-02-A-006, and JPO Surveillance Report, ANC-02-S-032, verified the Lessees have designated Alyeska Pipeline Service Company as agent for the operation and maintenance of TAPS. There are no compliance issues relating to Section 12.

SECTION 13 INDEMNIFICATION OF THE STATE; LIABILITIES OR DAMAGES ARISING WHERE THERE IS CONCURRENT USE

- a. Lessees shall be liable to the State for liabilities, damages or injury incurred by the State caused by the construction, operation or maintenance of the Pipeline, and they shall indemnify the State for these liabilities, damages or injuries.*
- b. The party at fault shall be liable under the provisions of Article VIII, Section 8, of the Alaska Constitution for the payment of damages for injury arising from noncompliance with all terms and conditions governing concurrent use.*

Scope

This applies during all phases of TAPS.

Summary

This section is a legal and administrative provision that does not require active, continuous compliance monitoring or surveillance.

Compliance

There are no compliance issues relating to Section 13.

SECTION 14 LIABILITY AND PROPERTY DAMAGE INSURANCE, SECURITY, UNDERTAKING OR GUARANTY

a. Any lessee shall procure and furnish liability and property damage insurance from a company licensed to do business in the State, or furnish other security or undertaking upon the terms and conditions the Commissioner considers necessary if the Commissioner finds that the net assets of that Lessee are insufficient to protect the public from damage for which such Lessee may be liable arising out of the construction or operation of the Pipeline.

b. (i) If the Commissioner finds that the net assets of any of the Lessees are insufficient to protect the public from damage for which any of the Lessees may be liable arising out of the construction or operation of the Pipeline, the Commissioner may require such Lessee to deliver to the Commissioner a valid and unconditional guaranty of the full and timely payment of all liabilities and obligations of the Lessee to the State under or in connection with this Lease.

(ii) It is recognized that a proposed guarantor of a Lessee may be a corporation (or an individual stockholder thereof) a partnership (or an individual partner thereof), an association that is authorized and empowered to sue and be sued and to hold the title to property in its own name (or an individual associate thereof), a joint stock company that is authorized and empowered to sue and be sued and to hold the title to property in its own name (or any individual participant therein), or a business trust (or any individual settler thereof), and may or may not directly or indirectly own a legal or beneficial interest in the Lessee whose liabilities and obligations are sought to be guaranteed. In the case of multiple guarantors that are acceptable to the Commissioner, each shall be severally liable for only its proportionate share of any sum or payment covered by the guaranty.

(iii) Each guaranty shall be satisfactory to the Commissioner in all respects including, without limitation, the form and substance of the guaranty, the financial capability of a proposed guarantor, the availability of such guarantor to service of process, the availability of the assets of such guarantor with respect to the enforcement of judgments against the guarantor, and the number of guarantors that will be necessary to guarantee all of the liabilities and obligations which will be covered by a particular guaranty; provided, however, that the Commissioner shall not unreasonably withhold his approval with respect to a guaranty or guarantor.

(iv) The Commissioner shall have the right at any time, and from time to time, to require the substitution and delivery of a new form of guaranty in the event either that an outstanding guaranty is held to be invalid or unenforceable, in whole or in part, by a court of competent jurisdiction or that the controlling law is, by statute or judicial decision, so altered as to impair, prevent or nullify the enforcement or exercise of any right or option

of the State under an outstanding guaranty; provided, however, that the outstanding guaranty (to the extent of its validity or enforceability, if any) shall continue in full force and effect with respect to any claim, suit, accrued liability or defense thereunder that exists at the time of substitution; provided, further, that the new form of guaranty, in each such case, shall be required as to all Lessees that at the time of substitution have delivered, or are required to deliver, a guaranty.

(v) Each guaranty shall be accompanied by such certificates and opinions of legal counsel as the Commissioner may require to establish its validity. The guaranty shall include an appointment of an agent for service of process that is satisfactory to the Commissioner.

Scope

This is a legal/administrative provision that applies throughout the term of the lease.

Summary

Upon notice from the Commissioner, Lessees shall furnish the State of Alaska liability and property damage insurance and/or a guarantee in an amount and form satisfactory to the Commissioner. The Commissioner has not notified any Lessees that they must furnish the State of Alaska liability and property damage insurance and/or a guarantee. This provision does not require active, continuous compliance monitoring or surveillance.

Compliance

JPO Assessment Report, ANC-02-A-006, documented the Commissioner has not notified any Lessees they must furnish the State of Alaska liability and property damage insurance and/or a guaranty in an amount and form satisfactory to the Commissioner. Williams Alaska Pipeline Company voluntarily submitted a guaranty to the State of Alaska, upon acquiring an interest in TAPS. JPO Assessment Report, ANC-02-A-006, and JPO Surveillance Report, ANC-02-S-033, conclude there are no compliance issues relating to Section 14.

SECTION 15 LANDS CONDEMNED UNDER AS 38.35.130

Any interest in land acquired under the provisions of AS 38.35.130 for the Pipeline will become part of the land leased to the Lessees under this Lease and the costs for the acquisition thereof shall be borne by the Lessees.

Scope

This requirement applies through the duration of the Lease.

Summary

All interests in land acquired through the use of the State's power of eminent domain shall be acquired in the State's name.

Compliance

JPO Assessment Report, ANC-02-A-006, and JPO Surveillance Report, ANC-02-S-034, concluded Civil court documents show that land acquired by the State of Alaska under

Alaska Statute 38.35.130 for the Trans-Alaska Pipeline System was leased to the Lessees by the State of Alaska and that the Lessee paid compensation to the owners for the land. There are no compliance issues relating to Section 15.

SECTION 16 CONSTRUCTION PLANS AND QUALITY ASSURANCE

- a. Lessees shall submit construction (including design) plans, a quality assurance program, and other related documents as required by the Pipeline Coordinator for review and approval prior to the issuing of Notices to Proceed.*
- b. The quality assurance program shall be comprehensive and designed to assure that the environmental and technical stipulations in this Lease will be fully complied with throughout all phases of construction, operation, maintenance and termination of the Pipeline.*
- c. The following criteria shall be included in the quality assurance program, although Lessees are not limited to these criteria:*
 - (i) Provide practicable and appropriate means and procedures, including contingency plans approved by the Pipeline Coordinator, for the prevention, detection and prompt abatement of any actual or potential condition that is susceptible to prevention or abatement by Lessees which arises out of, or could affect adversely, the construction, operation, maintenance or termination of all or any part of the Pipeline and which at any time may cause or threaten to cause (1) a hazard to the safety of workers or to public health or safety (including but not limited to personal injury or loss of life with respect to any Person or Persons) or (2) significant-harm or damage to the environment (including but not limited to public or private property, whether real, personal or mixed, or areas of vegetation or timber, fish or other wildlife populations or their habitats, water quality, air quality or any other natural resource).*
 - (ii) Provide practicable and appropriate means and procedures, including contingency plans approved by the Pipeline Coordinator, for the repair and replacement of substantially damaged tangible property and the rehabilitation of substantially damaged natural resources (including but not limited to revegetation, restocking fish or other wildlife populations and reestablishing their habitats, and restoring air and water quality) if the cause of the damage arises in connection with, or results from, the construction, operation, maintenance or termination of all or any part of the Pipeline.*
 - (iii) Provide for practicable and appropriate component and systems quality through quality control management and planning, and inspection and test procedures approved by the Pipeline Coordinator.*
 - (iv) Assure that the selection of Lessees' contractors, subcontractors, and contract purchases of materials and services are consistent with quality control procedures required by this section.*
 - (v) Determine quality performance by conducting surveys and field approved by the Pipeline Coordinator of all the facilities of Lessees' contractors and subcontractors.*
 - (vi) Maintain quality determination records on all of the above procedures to ensure data identification and retrieval approved by the Pipeline Coordinator.*

Scope

This section applies during all phases of TAPS.

Summary

The objective of the quality assurance program is to ensure Lease compliance, sound management of change and effective correction action. This objective is in keeping with the Lease requirements and is based on effectiveness rather than procedural adherence.

The Lessee developed a Quality Assurance (QA) program to assure compliance with the environmental and technical stipulations. Surveillances found programmatic problems with the quality assurance program. These problems were addressed in revisions to the quality assurance manual (QA-36, Revision 10). JPO approved Revision 10 of the QA Program in JPO Letter 01-187-DG. JPO monitors the approved program to ensure it meets the requirements of the lease.

For the period 1997-2001, the JPO CMP database contains references to 170 oversight reports (144 surveillances, 13 assessments and 13 technical engineering reports) related to Section 16. The reports referenced 887 attribute inspections. There were 44 findings associated with this section, with one finding pending JPO review. The finding is related to the supplier qualification program. Alyeska has not provided substantial evidence to support closure of this finding. JPO has been working with Alyeska to get closure of this finding.

Alyeska and the State Pipeline Coordinator entered into a Memorandum of Agreement (MOA) on February 28, 2002 (Appendix F) that outlines interim and longer-term strengthening of Alyeska's corrective actions. The MOA established dates to accomplish corrective actions.

Compliance

JPO Assessment and Engineering Reports, JPO-00-A-006, ANC-01-A-003, JPO-01-E-001 and JPO-00-E-031 address section 16 compliance issues. ANC-01-A-003 found that:

- 1) Alyeska consistently either conducts surveys and field inspections of its contractors and subcontractors or it accepts, as a "proxy," audits or supplies facilities performed by accrediting organizations;
- 2) That quality program controls established by Alyeska to determine supplier's capability to provide items and services that assure the integrity, maintenance, and operation of TAPS do not incorporate Lease requirements regarding surveys and field inspections of all of the facilities of its contractors and subcontractors. Alyeska is required to perform field inspections of the contractors and subcontractor's facilities;
- 3) The previous controls that Alyeska established to approve suppliers were based on maintaining a registration, license, or certification issued by an accrediting organization. These did not fully satisfy the Lease. The particular accrediting organization did to assure that suppliers can meet specific and applicable requirements of Alyeska's quality program but rather assesses suppliers only against the accrediting organization's standards.

Interpretation and administration of the lease is always developing in partnership with Alyeska.

There are no compliance issues relating to Section 16.

SECTION 17 RESERVATION OF CERTAIN RIGHTS TO THE STATE

a. *The State reserves and shall have a continuing and reasonable right of access to any part of the lands (including the subsurface of, and the air space above, such lands) that are subject to this Lease, and a continuing and reasonable right of physical entry to any part of the Pipeline, for inspection or monitoring purposes and for any other purpose or reason that is reasonably consistent with any right or obligation of the State under any law or regulation, this Lease, or any other agreement, permit or authorization relating in whole or in part to all or any part of the Pipeline.*

b. *The right of access and entry reserved in Subsection "a" of this section shall extend to and be enjoyed by any contractor of the State, any subcontractors (at any tier) of the contractor and their respective agents and employees, as well as such other Persons as may be designated from time to time in writing by the Pipeline Coordinator.*

c. *The granting of this Lease is subject to the express condition that the exercise of the rights and privileges granted under this Lease will not unduly interfere with the management, administration, or disposal by the State of the land affected by this Lease, and that the Lessees agree and consent to the occupancy and use by the State, its grantees, permittees, or other lessees of any part of the Right-of-Way not actually occupied or required by the Pipeline for the full and safe utilization of the Pipeline, for necessary operations incident to land management, administration, or disposal.*

d. *Pursuant to AS 38.05.125, the State reserves rights as follows:*

"The party of the first part, Alaska, hereby expressly saves, excepts and reserves out of the grant hereby made, unto itself, its lessees, successors, and assigns forever, all oils, gases, coal, ores, minerals, fissionable materials, and fossils of every name, kind or description, and which may be in or upon said lands above described, or any part thereof and the right to explore the same for such oils, gases, coal, ores, minerals, fissionable materials, and fossils, and it also hereby expressly saves and reserves out of the grant hereby made, unto itself, its lessees, successors, and assigns forever, the right to enter by itself, its or their agents, attorneys, and servants upon said lands, or any part or parts thereof, at any and all times, for the purpose of opening, developing, drilling, and working mines or wells on these or other lands and taking out and removing therefrom all such oils, gases, coal, ores, minerals, fissionable materials and fossils, and to that end it further expressly reserves out of the grant hereby made, unto itself, its lessees, successors, and assigns forever, the right by its or their agents, servants and attorneys at any and all times to erect, construct, maintain, and use all such buildings, machinery, roads, pipelines, power lines, and railroads, such shafts, drill such wells, remove such soil, and to remain on said lands or any part thereof for the foregoing purposes and to occupy as much of said lands as may be necessary or convenient for such purposes hereby expressly reserving to itself, its lessees, successors, and assigns, as aforesaid, generally all rights and power in, to, and over said land, whether herein expressed or not, reasonably necessary or convenient to render beneficial and efficient the complete enjoyment of the property and rights hereby expressly reserved."

e. There is reserved to the State the right to grant additional permits or easements for rights-of-way or other uses to third parties for compatible uses on, or adjacent to, the lands subject to the Right-of-Way. Before the State grants an additional right-of-way permit for a compatible use, the State will notify Lessees of its intentions and shall consult with Lessees before taking final action in that regard.

f. No rights shall be exercised by the State under this section until it complies with the provisions of AS 38.05.130.

Scope

This section applies during all phases of TAPS for the duration of the Lease. Subsection (f) is a legal/administrative provision that applies throughout the term of the lease.

Summary

Lessees shall provide to the State, and its contractors, subcontractors, agents, and employees at any level a continuing and reasonable right of access to any part of the lands that are subject to this Lease and a continuing and reasonable right of physical entry to any part of the Pipeline, for inspection or monitoring purposes and for any other purpose or reason that is reasonably consistent with any right or obligation of the State under any law or regulation, this Lease, or any other agreement, permit or authorization relating in whole or in part to all or any part of the Pipeline. Lessees shall not unduly interfere with the management, administration, or disposal by the State of the land affected by this Lease.

AS 38.35.120(a)(12) mandates that this provision is included in any Pipeline Right-of-Way Lease.

Compliance

JPO Assessment Report, ANC-02-A-006, and JPO Surveillance Report, ANC-02-S-035, concluded there is no evidence to suggest that entry or access has been denied to any State of Alaska staff. There are no compliance issues relating to Section 17.

SECTION 18 REIMBURSEMENT OF STATE EXPENSES

a. Lessees shall reimburse the State for all reasonable costs incurred by the State in monitoring construction (including but not limited to design review) and termination of all or any part of the pipeline system. The Commissioner shall administer this Lease to reasonably assure that unnecessary employment of personnel and needless expenditure of funds are avoided.

b. Reimbursement provided for in this section and in Section 19 hereof shall be made for each quarter ending on the last day of March, June, September and December. On or before the sixtieth (60th) day after the close of each quarter, the Commissioner shall submit to Lessees a written statement of any costs incurred by the State during that quarter which are reimbursable. This statement may be supplemented within sixty (60) days after the end of a fiscal year for costs incurred in that year but by excusable neglect not previously submitted.

c. Lessees shall have the right to conduct, at their own expense, reasonable audits by auditors or accountants designated by Lessees, of the books, records and documents of the State relating to the items on any particular statement that shall be submitted in accordance with the procedure outlined in Subsection "B" of this section, at the places where such books, records and documents are usually maintained and at reasonable times; provided, however, that written notice of a desire to conduct such an audit must be given to the Commissioner (1) at least fifteen (15) days prior to such audit, and (2) by not later than seventy-fifth (75th) day after the close of the quarter for which the books, records and documents are sought to be audited; and provided, further, that any such audits shall be completed within ninety (90) days after receipt by Lessees of the statement containing the items to be audited.

d. Nothing herein shall require the State to maintain books, records or documents other than those usually maintained by it, provided such books, records and documents reasonably segregate and identify the costs for which reimbursement is required by this section. Such books, records and documents shall be preserved or caused to be preserved for a period of at least two (2) years after the State submits a statement for reimbursement based on such books, records and documents. The auditors or accountants designated by Lessees shall have reasonable access to, and the right to copy, at their expense, all such books, records and documents.

e. Lessees shall pay to the State the total amount shown on each statement by not later than the ninetieth (90th) day following the close of the quarter to which the statement relates; provided, however, that if any of the Lessees decide to dispute any item of a statement for reimbursement, Lessees, on or before the date on which the statement is due and payable, shall give the Commissioner written notice of each item that is disputed, accompanied by a detailed explanation of their objection, or written notice of each item to be audited, and shall pay the State those amounts for the items that are not disputed or are not to be audited. Lessees shall give the Commissioner prompt written notice of the completion of the audit of all items of a statement being audited. On a date fixed by the Commissioner, but not more than thirty (30) days after notice of a disputed statement or after notice of the completion of the audit, the Commissioner and the Lessees shall meet to discuss and attempt to resolve, all items which are disputed or which have not been resolved by the audit. Any items resolved as being payable to the State shall be paid within thirty (30) days after being resolved, together with interest thereon to the date of payment at a total annual percentage rate to the discount rate of the Federal Reserve Bank for District Twelve (San Francisco) in effect on the original due date of the statement.

f. In addition to the right to audit quarterly statements as provided in Subsection "c" of this section, if Lessees believe that unnecessary employment of personnel or needless expenditure of funds has occurred or is likely to occur, Lessees may request the approval of the Commissioner for Lessees to conduct promptly, and at their own expense, a full and complete audit by auditors or accountants designated by Lessees, of the books, records and documents concerning the matters to be audited, at the places where the books, records and documents to be audited are usually maintained and at reasonable times. Such request shall be in writing, shall specify the matters to be audited and shall state the information available to Lessees upon which the request is based. The Commissioner shall approve or deny such request promptly, and approval of any such

request shall not be unreasonably withheld. Any complaint, which Lessees may have as a result of such audit, shall be made to the Commissioner and shall be governed by the procedure set forth in Subsection "e" of this section to the extent applicable.

Scope

This is a legal/administrative provision that applies throughout the term of the lease.

Summary

This provision requires the Lessee to reimburse the state for all reasonable costs incurred by the state in monitoring the pipeline system.

Compliance

JPO Assessment, ANC-02-006, and JPO Surveillance Report, ANC-02-S-036 examined the government billing and the Lessees' payment record and found the state had been reimbursed.

There are no compliance issues relating to Section 18.

SECTION 19 RIGHT OF THE STATE TO PERFORM

a. If, after thirty (30) days, or in emergencies such shorter periods as shall not be unreasonable, following the making of a demand therefore by the Commissioner in the manner that is provided in Stipulation 1.6 for giving written notices, Lessees, or their respective agents, employees, contractors or subcontractors (at any tier), shall fail or refuse to perform any action required by this Lease or by the Pipeline Coordinator under this Lease, the State shall have the right, but not the obligation to perform any or all of such actions at the sole expense of Lessees. Prior to delivery of any such demand, the Pipeline Coordinator shall confer with the Lessees, if practicable to do so, regarding the required action or actions that are included in the demand. The Pipeline Coordinator shall submit to Lessees a statement of the expenses incurred by the State during the preceding quarter in the performance by the State of any required action and the amount shown to be due on each such statement shall be paid by Lessees. Lessees may dispute whether the work involved was justified and the reasonableness of the specifications for, and the cost of, such work.

Scope

This section applies to actions taken by the State of Alaska to perform work required by this Lease or by the State Pipeline Coordinator under this Lease and demanded by the Commissioner, but not performed by the Lessees within the time period prescribed in this section. This section applies during all phases and parts of TAPS.

Summary

Lessees shall reimburse the State of Alaska for actions taken within the scope of this provision. Obligations under this section only become effective following the issuance of an order by the Commissioner.

Compliance

JPO Assessment Report, ANC-02-A-006, concluded the State has not performed any actions at the expense of the Lessees. There are no compliance issues relating to Section 19.

SECTION 20 BREACH: EXTENT OF LIABILITY OF LESSEES

The liabilities and obligations of each Lessee under this Lease are joint and several, except that the liabilities and obligations of each Lessee are several under the following sections:

Section	1	<i>Grant of Right-of-Way</i>
	2	<i>Duration of Right-of-Way</i>
	3	<i>Rental</i>
	4	<i>Common Carrier</i>
	5	<i>Interchange of oil</i>
	6	<i>Books, Accounts and Records; Access to Property and Records</i>
	7	<i>Connections for Deliver</i>
	8	<i>Corrections for State-Owned Oil</i>
	9	<i>Compliance with State Laws and with Regulations and Orders of the Alaska Pipeline Commission</i>
	10	<i>Damage or Destruction of Leasehold or Other Property</i>
	11	<i>Transfer, Assignment, or other Disposition</i>
	12	<i>Appointment of Agent for Service of Process</i>
	13	<i>Indemnification of the State; Liabilities or Damages Arising where there is Concurrent Use</i>
	14	<i>Liability and Property Damage Insurance, Security, Undertaking or Guaranty</i>
	15	<i>Lands Condemned under AS 38-35-130</i>
	18	<i>Reimbursement of State Expenses</i>
	19	<i>Right of the State to Perform</i>
	22	<i>Duty of Lessees to Prevent or Abate</i>
	28	<i>Local Hire</i>
	29	<i>Release of Right-of-Way</i>
	30	<i>Forfeiture of Lease</i>
	31	<i>Agreements among Lessees</i>
	35	<i>Remedies Cumulative; Equitable Relief</i>
	39	<i>Authority to Enter Agreements</i>
	42	<i>Binding Effect of Covenants</i>
		<i>Stipulation 1.4</i>
		<i>Stipulation 1.10.1</i>

Provided, however, that as to any obligation to pay money to the State, each Lessee shall not be liable for any greater portion thereof than the amount of the total liability multiplied times the percentage of its undivided interest in the Right-of-Way at the times the liability was incurred.

Scope

This is a legal/administrative provision that applies throughout the term of the lease.

Summary

See individual sections and stipulations for specific performance standards. Compliance cannot be assessed for this provision until the time of violation of a provision that imposes liability or obligation on one or more Lessees.

Compliance

JPO Assessment Report, ANC-02-A-006, concluded that this is an agreed upon term that is contingent on certain events occurring. Since these events have not yet occurred to date, the Lessees are in compliance with this provision. There are no compliance issues relating to Section 20.

SECTION 21 VALDEZ TERMINAL FACILITY

Lessees shall afford representatives of the United States Department of the Interior full and free access at all times to the Valdez Terminal site for the purpose of enforcing the stipulations of the United States Department of the Interior at the facility.

Scope

This provision applies during all phases of TAPS.

Summary

There is no evidence to suggest that entry or access has been denied to any Department of Interior staff, contractors, or subcontractors.

Compliance

JPO Assessment Report, ANC-02-A-006, and JPO Surveillance Report, ANC-02-S-037, concluded there is no evidence to suggest that entry or access has been denied to any Department of Interior staff, contractors, or subcontractors. There are no compliance issues relating to Section 21.

SECTION 22 DUTY OF LESSEES TO PREVENT OR ABATE

a. Lessees shall prevent or, if the procedure, activity, event or condition already exists or has occurred, shall abate, as completely as practicable, using the best practicable technology available, any physical or mechanical procedure, activity, event or condition, existing or occurring at any time (1) that is susceptible to prevention or abatement; (2) that arises out of, or could affect adversely, the con structure, operation,

maintenance or termination of all or any part of the Pipeline; and (3) that causes or threatens to cause (a) a hazard to the-safety of workers or to the public health or safety (including but not limited to personal injury or loss of life with respect to any Person or Persons) or (b) serious harm or damage to the environment (including but not limited to water and air quality, areas of vegetation or timber, fish or other wildlife populations, or their habitats, or any other natural resource).

b. Lessees shall cause their respective agents, employees, contractors and subcontractors (at any tier) to observe and comply with the foregoing provisions of this section.

Scope

This provision applies for the duration of the Lease.

Summary

The duty to prevent is a requirement expressed in multiple provisions of the Lease including Section 16, Section 22 and Stipulations 1.18.1. The State Pipeline Coordinator interprets the Lease to require that Lessees conduct all construction, maintenance, and termination activities in a manner that protects public and worker health and safety, or the environment by preventing any procedure, activity, event or condition which could or does result in serious or significant harm to these values and amenities. If a condition cannot be prevented it must be abated as completely as practicable using the best practicable technology available. Although not specifically mentioned under related requirements in the provision descriptions, the duty to prevent and abate noncompliances applies to all Lease sections and stipulations whose express or implicit purposes is to protect health, safety, or the environment, including provisions related to pipeline integrity.

Prevention of 100 percent of serious or significant harm to public and worker health and safety and the environment is the goal of the State Pipeline Coordinator, even though it may not always be practicable. However, by working toward a prevention goal with a commitment to continual improvement of performance, a high degree of success will be achieved.

Abatement means to put an end to, to nullify, or to reduce in degree or intensity. This section is worker and public health and safety oriented and overlaps many stipulations. The State Pipeline Coordinator does not actively monitor this section, since it is mainly a legal provision of the Lease. JPO conducts extensive monitoring of the integrity, safety and environmental issues that could rise to findings.

For the period 1997-2000, the JPO CMP database contains reference to 7 reports (3 assessments, 1 technical engineering report and 3 surveillance reports) related to Section 22. A total of 15 attributes were examined, all currently in satisfactory condition. There were no findings associated with this section.

Compliance

JPO reports, ANC-01-A-015, ANC-01-A-011, and FBU-01-E-006, cover restoration, fish and wildlife protection, clearing and pollution control. JPO Assessment Report, ANC-02-

A-001, looked at compliance with that broadly health and safety requirement and found no compliance findings. JPO Assessment Report, ANC-02-A-006, concludes the Lessees are in compliance with Section 22.

SECTION 23 COMPLIANCE WITH NOTICES TO PROCEED

All construction of the Pipeline on State Land under-taken by Lessees shall comply in all respects with the provisions of Notices to Proceed that are issued by the Pipeline Coordinator.

Scope

This section applies during all phases of TAPS and to all TAPS construction on State Land requiring new Right-of-Way, a design basis change to an Integrity Level 1 component in any part of the Pipeline System, or when directed by the State Pipeline Coordinator.

Summary

Lessees shall comply in all aspects with provisions of Notices to Proceed issued by the State Pipeline Coordinator, unless the State Pipeline Coordinator has given written notice of an alteration as contemplated in Stipulation 1.7.1.3.

By a letter to the Alyeska Pipeline Service Company issued October 7, 1997; the JPO clarified what actions qualified, as construction required a Notice to Proceed (NTP). The letter required NTPs when construction requires new Right-of-Way or when a construction project directly affects a Design Basis change to an integrity L-1 component. The State Pipeline Coordinator anticipates updating this directive to incorporate requiring NTPs when advisable to ensure protection of the environment.

Stipulation 1.7.1.1 forbids Lessees from initiating any construction of the Pipeline System without receiving approval of the State Pipeline Coordinator through a Notice to Proceed. Section 16A requires Lessees to submit construction plans, a quality assurance program, and other related documents deemed necessary by the State Pipeline Coordinator for review and approval prior to the issuance of a Notice to Proceed.

Compliance

JPO Technical Report, FBU-02-E-001 and JPO Assessment Reports, JPO-00-A-004, ANC-02-A-006 concludes there is no evidence of noncompliance with section 10.

SECTION 24 TEMPORARY SUSPENSION ORDERS OF THE PIPELINE COORDINATOR

a. The Pipeline Coordinator may at any time order the temporary suspension of any or all construction, operation, maintenance or termination activities of Lessees, their agents, employees, contractors or subcontractors (at any tier) in connection with the Pipeline, including but not limited to the transportation of Oil, if

(i) An immediate temporary suspension of such activities is necessary to protect (A) public health or safety (including, but not limited to, personal injury or loss of life with respect to any Person or Persons), or (B) the environment from immediate, serious and irreparable harm or damage (including, but not limited to, harm or damage to water and air quality, areas of vegetation or timber, fish or other wildlife populations, or their habitats, or any other natural resource); or

(ii) Lessees, their respective agents, employees, contractors or subcontractors (at any tier) are failing or refusing, or have failed or refused, to comply with or observe (A) any provision of this Lease necessary to protect public health, safety or the environment, or (B) any order of the Pipeline Coordinator implementing any such provisions of this Lease or of any agreement, permit or authorization that shall have been duly approved, issued or granted by the Pipeline Coordinator in connection with all or any part of the Pipeline.

b. The Pipeline Coordinator shall give Lessees prior notice of any temporary suspension order as he deems practicable. If circumstances permit, the Pipeline Coordinator shall discuss with Lessees, prior to issuing the order, appropriate measures to (i) forthwith abate or avoid the harm or threatened harm that is the reason for the issuance of the order or (ii) effect compliance with the provision or order, whichever is applicable.

c. After a temporary suspension order has been given by the Pipeline Coordinator, Lessees shall promptly comply with all of the provisions of the order and shall not resume any activity suspended or curtailed thereby except as provided in this Lease or pursuant to court order.

d. Any temporary suspension order which, in an emergency, is given orally shall be confirmed in writing, as provided for in Stipulation 1.6.2. Each written order or written confirmation of an order shall set forth the reasons for the suspension. Each temporary suspension order shall be limited, insofar as is practicable, to the particular area or activity that is or may be affected by the activities or conditions that are the as is of the order. Each order shall be effective as of the date and time given, unless it specifies otherwise. Each order shall remain in full force and effect until modified or revoked in writing by the Pipeline Coordinator.

e. Resumption of any suspended activity shall be promptly authorized by the Pipeline Coordinator in writing when he is satisfied that (i) the harm or threatened harm has been abated or remedied, or (ii) Lessees have effected, or are ready, willing and able to effect compliance with the provision or order, whichever is applicable.

f. Any temporary suspension order that is given or issued in accordance with this section shall be subject to the provisions of Section 25.

Scope

This section applies during all phases of TAPS.

Summary

Compliance with these requirements is accomplished thorough continuous monitoring to verify that the Lessees have complied with all of the provisions of any temporary suspension order issued by the State Pipeline Coordinator. Section 24 has a compliance

aspect only if a temporary suspension order has been issued and a notice of appeal has been filed.

Compliance

JPO Assessment Report, ANC-02-A-006, and JPO Surveillance Report, ANC-02-S-038, concludes no suspension orders have been issued by the State Pipeline Coordinator to date. There are no compliance issues relating to Section 24.

SECTION 25 APPEAL PROCEDURE

a. Appeals from Temporary Suspension Orders of Pipeline Coordinator; Appeals from Denials of Resumption of Suspended Activities:

(i) Lessees may appeal directly to the Commissioner for review of (A) any temporary suspension order issued by the Pipeline Coordinator pursuant to Section 24 of this Lease; and (B) any denial by the Pipeline Coordinator of a request for resumption of activities suspended pursuant to such temporary suspension order. Lessees shall file a notice of appeal for review promptly after the effective date of the order or denial being appealed. The notice shall set forth with particularity the order or denial being appealed. To perfect an appeal, Lessees shall promptly file with the Commissioner a statement of facts of the matter and a statement of applicable law supplemented by such documents and arguments on the facts and the law as Lessees may wish to present to justify modification or reversal of the order or denial. All statements of facts shall be under oath.

(ii) Except as provided hereinafter in this section, the Commissioner shall decide the appeal within three (3) days from the date the Commissioner receives notice from Lessees that all statements for review have been submitted. If the Commissioner does not render a decision within that time, the appeal shall be considered to have been denied by the Commissioner, and such denial shall constitute the final administrative decision of the Commissioner.

(iii) Any decisions of the Commissioner as to any matter arising out of this Lease shall constitute the final administrative decision of the Commissioner.

b. Appeals with Respect to Notices to Proceed:

(i) Lessees may appeal to the Commissioner if, with respect to a particular application for a Notice to Proceed (A) the Pipeline Coordinator has refused to issue the Notice to Proceed within the time described pursuant to Stipulation 1.7.4.4; or (B) the Pipeline Coordinator has issued a Notice to Proceed not substantially in accord with the application therefore. If the Pipeline Coordinator has not acted within the prescribed time to either issue or deny the issuance of the Notice to Proceed, such failure to act shall be deemed to be a refusal by the Pipeline Coordinator to issue the Notice to Proceed.

(ii) The ground or grounds for such an appeal shall be one or more of the following:

(A) The Pipeline Coordinator has construed the applicable Stipulations erroneously; or

(B) The Pipeline Coordinator has imposed arbitrary and capricious requirements to enforce the Stipulations; or

(C) Lessees have made a bona fide effort to meet the requirements of the Pipeline Coordinator, but with the best practicable technology available, are unable to comply; or

(D) By failing to act upon the requested Notice to Proceed within the prescribed time, the Pipeline Coordinator has been unreasonable.

(iii) Each appeal under this subsection shall be subject to the appeal procedure set forth in Subsection "a" of this section.

c. As to any other matter relating to construction upon which a decision of the Commissioner is required under this Lease, the failure of the Commissioner to render a decision within three (3) days after receiving a request for a decision from the Lessees shall constitute a denial of that request and shall constitute the final administrative decision of the Commissioner.

d. As to matters not covered by Subsections "a", "b" and "c" of this section upon which a decision of the Commissioner is required under this Lease, the failure of the Commissioner to reach a decision within thirty (30) days after receiving a request for a decision from the Lessees shall constitute a denial of that request and shall constitute the final administrative decision of the Commissioner.

Scope

This is a legal/administrative provision that applies throughout the term of the lease.

Summary

Section 25 is a legal provision that has a compliance aspect only if a temporary suspension order has been issued and a notice of appeal has been filed.

Compliance

JPO Assessment Report, ANC-02-A-006, concludes that neither the State Pipeline Coordinator nor the Commissioner have issued temporary suspension orders resulting in filed appeals and therefore, there are not compliance issues related to Section 25.

SECTION 26 REQUESTS TO RESUME; APPEALS

a. If by a temporary suspension order issued pursuant to Section 24 of this Lease, the Pipeline Coordinator has ordered the suspension of an activity of Lessees, Lessees may at any time thereafter file with the Pipeline Coordinator a request for permission to resume that activity on the ground that the reason for the suspension no longer exists. The request shall contain a statement, under oath, of the facts which in Lessees' view support the propriety of resumption.

b. The Pipeline Coordinator shall render a decision, either granting or denying the request, within three (3) days of the date that the request was filed with him. If the Pipeline Coordinator does not render a decision within that time, the request shall be considered denied and the Lessees may appeal to the Commissioner as provided in Section 25.

Scope

This is a legal/administrative provision that applies throughout the term of the lease.

Summary

This is a legal provision that has a compliance aspect only if a temporary suspension order has been issued and a request to resume presented.

Compliance

JPO Assessment Report, ANC-02-A-006 concludes the State Pipeline Coordinator has not issued any temporary suspension orders to suspend Lessee's activities. There are no compliance issues relating to Section 26.

SECTION 27 LIABILITY OF THE STATE

Lessees agree that neither the State nor any of its officials, employees, agents or contractors shall be liable for money damages for any loss caused to Lessees, their agents or contractors, by reason of decisions made in respect to the application and administration of this Lease; provided, however, this Lease shall not be interpreted to excuse the State, its officials, employees, agents or contractors from liability for damages or injuries resulting from other acts which are acts of negligence or acts of willful misconduct.

Scope

This is a legal/administrative provision that applies throughout the term of the lease.

Summary

There is no evidence of noncompliance with any outstanding liens against the Lease.

Compliance

JPO Assessment Report, ANC-02-A-006, concludes there is no evidence of noncompliance with any outstanding liens against the lease. There are no compliance issues relating to Section 27.

SECTION 28 LOCAL HIRE

Lessees shall comply with all valid and applicable laws and regulations with regard to hire of Alaska residents. Qualified Alaska residents shall be hired as required by AS 38.40; Lessees shall not discriminate against Alaska residents, as prohibited by AS 38.40 and other applicable and valid laws and regulations of the State of Alaska. All valid and appropriate provisions of AS 38.40 are incorporated by reference into this Lease.

Scope

This section applies during all phases of TAPS.

Summary

The Alaska Legislature repealed Alaska Statute 38.40 in 1980. The Alaska Supreme Court ruled that the local hire provisions of Section 28 of the Right-of-Way Lease were

unconstitutional. However, the Lessees have maintained a policy of local hire and in 1997 reported a 95.7% local hire rate.

Compliance

JPO Assessment Report, ANC-02-A-006 concluded there are no compliance issues relating to Section 28.

SECTION 29 RELEASE OF RIGHT-OF-WAY

a. In connection with the relinquishment or other termination before the expiration of the grant of the Right-of-Way, or any right of interest in the Right-of-Way, and/or in the use of all or any part of the lands subject to the Right-of-Way, each Lessee holding such right or interest shall promptly execute and deliver to the State, through the Commissioner, a valid instrument of release in recordable form, which shall be executed and acknowledged with the same formalities as a deed. The instrument of release shall contain, among other things, appropriate recitals, a description of the pertinent rights and interests, and for the benefit of the State and its grantees or assigns, express representations and warranties by the Lessees that they are the sole owners and holders of the rights or interests described therein and that such rights or interests are free and clear of all liens, equities or claims of any kind requiring or that may require the consent of a third party, claiming in whole or in part by, through or under the Lessees, for the valid release or extinguishment thereof, except for such that are owned or claimed by third parties which have joined in the execution of the release. The form and substantive content of each instrument of release shall be approved by the Commissioner, but except as otherwise expressly provided for in this subsection, in no event shall any such instrument operate to increase the then-existing liabilities and obligations of the Lessees furnishing the release.

b. Each release shall be accompanied by such resolutions and certifications as the Commissioner may require in connection with the power or the authority of the Lessees, or of any officer or agent acting on the behalf, to execute, acknowledge or deliver the release.

c. Neither the tender, nor the tender, approval and acceptance, of any such release shall operate as an estoppel or waiver of any claim or judgment against a Lessee or as a relief or discharge, in whole or in part, of any Lessee from any of its then-existing liabilities or obligations (accrued, contingent or otherwise); and notwithstanding any such tender or delivery, or any approval of the Commissioner, if a release shall contain any provision that operates, or that by implication might operate, to discharge or relieve, in whole or in part, a Lessee of and from any of its liabilities or obligations (accrued, contingent or otherwise) or that operates or might operate as an estoppel or waiver of any claim or judgment against a Lessee or as a covenant not to sue, such provision shall be, and shall be deemed to be, void and of no effect whatsoever insofar as it would have the effect of so discharging or relieving a Lessee or operating as an estoppel, waiver of covenant not to sue.

Scope

This section covers the Lessees' obligation to notify the Commissioner in writing of any release of Lessee interest in the Right-of-Way for the duration of the Lease.

Summary

The Lessees are required to provide the State Pipeline Coordinator with an executed and valid release, which is approved by the Commissioner for any relinquishment, abandonment, or other termination of rights of interest in, or use of TAPS Right-o-Way lands. Lessees must also comply with any additional requests for accompanying resolutions or certifications from the Commissioner.

Compliance

JPO Assessment Report, ANC-02-A-006, concluded there are no compliance issues relating to Section 29.

SECTION 30 FORFEITURE OF LEASE

Failure to begin construction of the Pipeline within a reasonable time of the granting of this Lease for reasons within the control of the Lessee or failure of a Lessee of an interest in the Right-of-Way substantially to comply with the terms of the Lease shall be grounds for forfeiture of the Right-of-Way interest of the Lessee in an action brought by the Commissioner in the Superior Court. Before the commencement of an action for forfeiture of an interest in the Right-of-Way under this section, the Commissioner shall give the Lessee or Owner of the interest notice in writing of the alleged default and shall not commence the proceeding unless the Lessee of the interest has failed to initiate good faith efforts to cure the default within 60 days of the notice of the alleged default.

Scope

This is a legal/administrative provision that applies throughout the term of the lease.

Summary

This section applies to initiation of original construction of the Pipeline System. The requirements of this provision were met in full upon construction of the Pipeline System. The Pipeline was constructed within a reasonable time of the granting of the Lease.

Compliance

JPO Assessment Report, ANC-02-A-006 concluded there are no compliance issues relating to Section 30.

SECTION 31 AGREEMENT AMONG LESSEES

a. The Original Lessees, and each of them, represent and covenant with the State that they have entered into only the following agreements, and no other agreements, written or oral (excluding prior agreements that no longer have any force or effect),

which establish each original Lessee's interest in the Pipeline and each Original Lessee's relationships with the Common agent, as referred to in Stipulation 1.4, for all or any phase of the construction, operation, maintenance and termination of the Pipeline or any part thereof:

(i) Agreement entitled "Trans-Alaska Pipeline System Agreement", dated as of August 27, 1970, by and among Atlantic Pipe Line Company, BP Pipe Line Corporation*, Humble Pipe Line Company*, Amerada Hess Corporation, Home Pipe Line Company, Mobil Pipe Line company, Phillips Petroleum Company, and Union Oil Company of California, with Exhibit "C," entitled "Enabling Agreement," annexed thereto;*

(ii) Agreement entitled "First Supplemental Agreement," dated as of August 27, 1970, by the same parties;

(iii) Agreement entitled "Second Supplemental Agreement," dated as of August 27, 1970, by the same parties;

(iv) Agreement entitled "Third Supplemental Agreement," dated as of August 27, 1970, by the same parties;

(v) Agreement entitled "Fourth Supplemental Agreement," dated as of August 27, 1970, by the same parties;

(vi) Agreement entitled "Fifth Supplemental Agreement, dated as of August 27, 1970, by the same parties;

(vii) Agreement entitled "Agreement for the Design and Construction of the Trans-Alaska Pipeline System," dated as of August 27, 1970, by and among Atlantic Pipe Line Company, BP Pipe Line Corporation, Humble Pipe Line Company, Amerada Hess Corporation, Home Pipe Line Company, Mobil Pipe Line Company, Phillips Petroleum Company, Union Oil Company of California, and Alyeska Pipeline Service Company;

(viii) Agreement entitled "Shareholders Agreement for Alyeska Pipeline Service Company," dated as of August 27, 1970, by the same parties as those listed with respect to the Agreement referred to immediately above;

(ix) Assignment, Assumption, Release and Consent Agreement, dated as of August 28, 1970, in connection with the transfer by Home Pipe Line Company of all of its rights, title and interest in the Pipeline System and in the foregoing agreements, and as a shareholder in and to Alyeska Pipeline Service Company;

**Note: ARCO Pipe Line Company, a Delaware corporation, represents and covenants that it is the successor by merger to all of the rights and obligations of Atlantic Pipe Line Company. Sohio Pipe Line Company, a Delaware corporation, represents and covenants that it is the successor by merger to all of the rights and obligations of BP Pipe Line Corporation. Exxon Pipeline Company, a Delaware corporation, represents and covenants that it is the same corporation as Humble Pipe Line Company, but that its name has been duly changed to "Exxon Pipeline Company."*

(x) Assignment, Conveyance, and Transfer Agreement, dated December 11, 1973, in connection with the transfer by Mobil Pipe Line Company to Mobil Alaska Pipeline Company, a Delaware corporation, of all of the former company's rights under all agreements relating to the Trans-Alaska Pipeline System, to which the former company is a party, and all real or personal property in which the former company may have acquired an ownership interest pursuant to such agreements, and under which

Assignment, Conveyance, and Transfer Agreement Mobil Alaska Pipeline, Company assumes all undischarged obligations of Mobil Pipe Line Company under any and all of the above mentioned Trans-Alaska Pipeline System agreements, together with certain supporting documents, each dated December 11, 1973; and

(xi) Assignment, Conveyance, and Transfer Agreement, dated January 8, 1974, in connection with the transfer by Union Oil Company of California to Union Alaska Pipeline Company, a California corporation, of all of the former company's rights under all agreements relating to the Trans-Alaska Pipeline System to which the former company is a party, and all real or personal property in which the former company may have acquired an ownership interest pursuant to such agreements, and under which Assignment, Conveyance and Transfer Agreement Union Alaska Pipeline Company assumes all undischarged obligations of Union Oil Company of California under any and all of the above mentioned Trans-Alaska Pipeline System agreements.

b. Said agreements are referred to collectively as the "Ownership Agreements." Each affected Lessee shall deliver promptly to the Commissioner true and correct copies of all modifications of the Ownership Agreements and of all instruments superseding, supplementing, canceling or rescinding, in whole or in part, any one or more of the Ownership Agreements.

c. In the event Lessees execute an Operating Agreement, as contemplated in Section 5.1 of the Agreement described in Subsection "a"(i) above in this section, or any like or similar agreement with respect to the operation, maintenance or termination of all or any part of the Pipeline, Lessees shall promptly provide the Commissioner with a true and complete copy thereof, together with like copies of all modifications of, and all agreements superseding, supplementing, canceling or rescinding, in whole or in part, the Operating Agreement or any such like or similar agreement.

Scope

This provision applies to all Lessees and each Lessee's agreements relating to ownership of TAPS and their common agent/operator, Alyeska Pipeline Service Company.

Summary

Lessees are required to represent to the State of Alaska they have entered into the agreements listed in this Section, and no other agreements, written or oral (excluding prior agreements that no longer have any force or effect), which establish each original Lessees' interest in the Pipeline System and each original Lessees' relationships with the common agent, as referred to in Stipulation 1.4 of the State Right-of-Way Lease for all or any phase of TAPS. Lessees must promptly file true and complete copies of all new and modified Ownership Agreements with the State Pipeline Coordinator and any amendment and supplemental Ownership Agreements.

Compliance

JPO Assessment Report, ANC-02-A-006 concluded there are no compliance issues relating to Section 31.

SECTION 32 RIGHTS OF THIRD PARTIES

The parties hereto do not intend to create any rights under this Lease that may be enforced by third parties for their own benefit or for the benefit of others.

Scope

This is a legal/administrative provision that applies throughout the term of the lease.

Summary

This section does not require active, continuous compliance monitoring or surveillance.

Compliance

JPO Assessment Report, ANC-02-A-006, concluded there are no compliance issues relating to Section 32.

SECTION 33 COVENANTS INDEPENDENT

Each covenant contained in this Lease is, and shall be deemed to be, separate and independent of, and not dependent on, any other covenant contained in this Lease.

Scope

This is a legal/administrative provision that applies throughout the term of the lease.

Summary

This section does not require active, continuous compliance monitoring or surveillance.

Compliance

JPO Assessment Report, ANC-02-A-006, concluded there are no compliance issues relating to Section 33.

SECTION 34 WAIVER NOT CONTINUING

The waiver by any party hereto of any breach of any provision of this Lease by any other party hereto, whether such waiver be expressed or implied, shall not be construed to be a continuing waiver or a waiver of, or consent to, any subsequent or prior breach on the part of such other party, of the same or any other provision of this Lease.

Scope

This is a legal/administrative provision that applies throughout the term of the lease.

Summary

This section has a compliance aspect only if waivers of any breach of the Lease have occurred. No waivers have occurred therefore the Lessees are in compliance with this provision.

Compliance

JPO Assessment Report, ANC-02-A-006, concluded there are no compliance issues relating to Section 34.

SECTION 35 REMEDIES CUMULATIVE; EQUITABLE RELIEF

No remedy conferred by this Lease upon or reserved to the State or the Lessees is intended to be exclusive of any other remedy provided for by this Lease or by law, but each shall be cumulative and shall be in addition to every other remedy given hereunder or now or hereafter existing in equity or at law; and the State, in a proper action instituted by it, may seek a decree against a Lessee or Lessees for specific performance and injunctive or other equitable relief, as may be appropriate.

Scope

This is a legal/administrative provision that applies throughout the term of the lease.

Summary

This section does not require active compliance verification or continuous monitoring.

Compliance

JPO Assessment Report, ANC-02-A-006, concluded there are no compliance issues relating to Section 35.

SECTION 36 SECTION HEADINGS

The section headings in this Lease are for convenience only, and do not purport to, and shall not be deemed to, define, limit or extend the scope or intent of the section to which they pertain.

Scope

This is a legal/administrative provision that applies throughout the term of the lease.

Summary

This section does not require active compliance verification or continuous monitoring.

Compliance

JPO Assessment Report, ANC-02-A-006, concluded there are no compliance issues relating to Section 36.

SECTION 37 INTERPRETATION OF LEASE

The applicable law of the State will be used in resolving questions of interpretation of the Lease.

Scope

This is a legal/administrative provision that applies throughout the term of the lease.

Summary

This section does not require active compliance verification or continuous monitoring.

Compliance

JPO Assessment Report, ANC-02-A-006, concluded there are no compliance issues relating to Section 37.

SECTION 38 MULTIPLE COPIES

This Lease shall be executed in eight counter parts, each of which shall be an original, but all of which shall constitute one and the same instrument.

Scope

This is a legal/administrative provision that applies throughout the term of the lease.

Summary

This section does not require active compliance verification or continuous monitoring.

Compliance

JPO Assessment Report, ANC-02-A-006, concluded there are no compliance issues relating to Section 38.

SECTION 39 AUTHORITY TO ENTER AGREEMENT

*Each Lessee represents and warrants to the State that (a) it is duly authorized and empowered under the applicable laws of the state of its incorporation and by its charter and by-laws to enter into and perform this Lease in accordance with the provisions hereof; (b) its board of directors or duly authorized executive committee has duly approved and has duly authorized the execution, delivery and performance of this Lease insofar as it pertains to the obligations of that Lessee; (c) all corporate and shareholder action that may be necessary or incidental to the approval of this Lease, and the due execution and delivery hereof by Lessee, has been taken; and (d) that all of the foregoing approvals, authorizations and actions are in **full** force and effect at the time of the execution and delivery hereof.*

Scope

This is a legal/administrative provision that applies throughout the term of the lease.

Summary

All required actions on the part of the Lessees were completed prior to the execution of the State Right-of-Way Lease.

Compliance

JPO Assessment Report, ANC-02-A-006, concludes there are no compliance issues relating to Section 39.

SECTION 40 EXHIBITS: INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE; OTHER EXHIBITS

a. The exhibits that are attached to this Lease and that are listed below in this subsection are, by this reference, incorporated into and made a part of this Lease as if the exhibits were set forth herein in their entirety:

(i) Stipulations for the Right-of-Way Lease for the Trans-Alaska Pipeline, being, numbered 1 through 4.1, inclusive, attached hereto as Exhibit "A, which are sometimes referred to in this Lease as the "Stipulations." These provisions are included pursuant to the provisions of AS 38.35.120(d) which require terms and conditions that are reasonably necessary to obligate the Lessees, to the extent reasonably practicable, to (A) prevent conflicts with other existing uses of the land involving a superior public interest; (B) protect State and private property interests; (C) prevent any significant adverse environmental impact, including but not limited to the erosion of the surface of the land, and damage to fish and wildlife and their habitat; (D) restore and revegetate during the term and at termination of this Lease; and (E) protect the interests of individuals living in the general area of the Right-of-Way who rely on fish, wildlife and biotic resources of the area for subsistence purposes.

(ii) A reference to the application for a Right of-way and a reference to the accompanying alignment maps and site location drawings for the Pipeline attached hereto as Exhibit "B".

(iii) A description of the State Land included in the General Route attached hereto as Exhibit "C".

(iv) A description of the Right-of-Way, including all relevant dimensions, for Related Facilities attached hereto as Exhibit "D".

b. The exhibits that are attached to this Lease that are listed below in this subsection are not incorporated into, and are not intended to be made a part of, this Lease. They are attached hereto only for informational purposes:

(i) Cooperative Agreement between the State of Alaska and the United States Department of Interior regarding the Proposed Trans-Alaska Pipeline attached hereto as Exhibit "E".

(ii) Documents delegating certain responsibilities and authority of the Commissioner of Natural Resources to a Pipeline Coordinator attached hereto as Exhibit "F".

Scope

This is a legal/administrative provision that applies throughout the term of the lease.

Summary

This section does not require active compliance verification or continuous monitoring.

Compliance

JPO Assessment Report, ANC-02-A-006, concludes there are no compliance issues relating to Section 40.

SECTION 41 STATE REGULATORY POWER

This Lease and the covenants contained herein shall not be interpreted as a limit on the exercise by the State of Alaska of any power conferred by valid statute or regulation to protect the environment, health, safety, general welfare, lives, or property of the people of the State of Alaska.

Scope

This is a legal/administrative provision that applies throughout the term of the lease.

Summary

This section does not require active compliance verification or continuous monitoring.

Compliance

JPO Assessment Report, ANC-02-A-006, concludes there are no compliance issues relating to Section 41.

SECTION 42 BINDING EFFECT OF COVENANTS

The parties acknowledge that all covenants of this Lease are required by the Commissioner. By entering into this Lease, each Lessee is bound by such covenants to the full extent of the power of the State to impose the covenants under its authority as owner of the land herein leased or under its police or regulatory powers or otherwise; provided that the rights of any or all Lessees to challenge the power of the State to require any of these covenants as owner of the land herein leased or under its police or regulatory powers or otherwise is preserved until such time as action to enforce the covenant is taken by the State. Before commencing any such action the Commissioner shall give all Lessees written notice of intent to enforce, and he shall not commence enforcement proceedings unless Lessees have failed to initiate good faith efforts to comply with the notice within Thirty (30) days of said notice. Compliance with any covenant or with any such notice by any or all Lessees, shall not constitute a waiver of its or their rights to challenge, from time to time, the power of the State to require or to enforce the same or any other covenant in any subsequent action to enforce taken by the State. A judicial finding that any of these covenants is unlawful or invalid shall not operate to invalidate this Lease or any other covenant of the Lease.

Scope

This is a legal/administrative provision that applies throughout the term of the lease.

Summary

This section does not require active compliance verification or continuous monitoring.

Compliance

JPO Assessment Report, ANC-02-A-006, concludes there are no compliance issues relating to Section 42.

EXHIBIT A

STIPULATIONS FOR THE RIGHT-OF-WAY LEASE FOR THE TRANS-ALASKA PIPELINE SYSTEM

1. GENERAL

STIPULATION 1.1. DEFINITIONS

Stipulation 1.1.1. As used in these Stipulations and elsewhere in this "Right-of-Way Lease for the Trans-Alaska Pipeline", the following terms have the following meanings:

Stipulation 1.1.1.1. "Access Roads" means the roads constructed or used by Lessees within, or for ingress to and egress from, the Pipeline. It does not include the proposed State highway from the Yukon River to Prudhoe Bay, Alaska, or any other State highway.

Stipulation 1.1.1.2. "Affiliate" means (a) a Subsidiary of a Parent, or (b) the Parent of a Subsidiary, or (c) in the case of a corporate Subsidiary, a corporation that shares the Parent with the Subsidiary by reason of the fact that all of the outstanding capital stock of each of the corporations that share the Parent is owned directly or indirectly by the Parent, or (d) in the case of Sohio Pipe Line Company, any corporation of which all of the outstanding capital stock is owned directly or indirectly by The Standard Oil Company, an Ohio corporation, or The British Petroleum Company, Limited, a United Kingdom corporation, or both.

Stipulation 1.1.1.3. "Affiliates" means more than one Affiliate.

Stipulation 1.1.1.4. "Authorized Officer" means the employee of the United States Department of Interior, designated by the Secretary of the Interior, to whom the Secretary of the Interior delegates the authority to act on behalf of the Secretary of the Interior pursuant to the Agreement and Grant of Right-of-Way for Trans-Alaska Pipeline between the United States of America and the Original Lessees, or such other Person to whom the Authorized Officer redelegates his authority pursuant to the delegation of authority to the Authorized Officer from the Secretary of the Interior.

Stipulation 1.1.1.5. "Business Entity" means a legal entity, formed to conduct one or more ventures for profit, or not for profit, that is duly authorized and empowered to sue and be sued, and to hold the title to property, in its own name.

Stipulation 1.1.1.6. "Commissioner" means the Commissioner of Natural Resources of the State of Alaska.

Stipulation 1.1.1.7 "Commissioning" means the acceptance and taking of custody by any of the Lessees of the first oil tendered for shipment through the Pipeline after provision

for line fill and tank bottoms. Lessees shall, by written notice, promptly advise the Commissioner of the date upon which acceptance and taking of custody takes place.

Stipulation 1.1.1.8. "Construction Mode" means the type of construction to be employed generally with regard to the Pipeline (e.g., whether the pipe will be buried or elevated).

Stipulation 1.1.1.9. "Construction Modes" means more than one Construction Mode.

Stipulation 1.1.1.10. "Construction Segment" means a portion of the Pipeline that constitutes a complete physical entity or stage, in and of itself, which can be constructed, independently of any other portion or stage of the Pipeline, in a designated area or between two given geographical points reasonably proximate to one another. It is not to be construed as referring to the entirety of the Pipeline.

Stipulation 1.1.1.11. "Construction Segments" means more than one Construction Segment.

Stipulation 1.1.1.12. "Construction Subdivision" means any one of approximately six (6) large, lineal sections of the route of the Pipeline as determined by the Pipeline Coordinator after consulting with Lessees.

Stipulation 1.1.1.13. "Construction Subdivisions" means more than one Construction Subdivision.

Stipulation 1.1.1.14. "Final Design" comprises completed design documents. It shall include contract plans and specifications; proposed Construction Modes; operational requirements necessary to justify designs; schedules; design analysis (including sample calculations for each particular design feature); all functional and engineering criteria; summaries of tests conducted and their results; and other considerations pertinent to design and project life expectancy.

Stipulation 1.1.1.15. "General Route" means the general route of the pipeline across State land as shown on the alignment map referred to in Exhibit B attached hereto, and it encompasses and includes the sections specifically listed in Exhibit C.

Stipulation 1.1.1.16. "Lease" means the instrument or extension of an instrument issued by the Commissioner granting a Leasehold interest in State Land for pipeline right-of-way purposes to a Person and authorizing the construction or operation of, or transportation, service or sale by, a pipeline for oil.

Stipulation 1.1.1.17. "Leasehold" means the interest in real property granted to Lessees pursuant to AS 38.35.

Stipulation 1.1.1.18. "Lessee" means any one of the Lessees.

Stipulation 1.1.1.19. "Lessees" means the original Lessees, or their respective successors, subLessee and/or assigns holding an undivided ownership interest in the Right-of-Way to the extent issued or authorized by the Commissioner in accordance with the provisions of this Lease.

Stipulation 1.1.1.20. "Lieutenant Governor" means the Lieutenant Governor of the State of Alaska.

Stipulation n1.1.1.21. "Mapping Segment" means a Construction Subdivision, or any part thereof, as determined by the Pipeline Coordinator; provided, however, that with respect to a pump station, basic communication site, remote control valve site, mechanical refrigeration equipment site and other like Related Facility, a Mapping Segment means the entire site.

Stipulation 1.1.1.22. "Notice to Proceed" means a permission to initiate Pipeline construction that is issued in accordance with Stipulation 1.7.1.1.

Stipulation 1.1.1.23. "Notices to Proceed" means more than one Notice to Proceed.

Stipulation 1.1.1.24. "Oil" means unrefined liquid hydrocarbons, including gas liquids.

Stipulation 1.1.1.25. "Operation" means all activities connected with the transportation of Oil through the Pipeline including maintenance of the Pipeline.

Stipulation 1.1.1.26. "Original Lessee" means any one of the Original Lessees.

Stipulation 1.1.1.27. "Owner" means any one of the Lessees.

Stipulation 1.1.1.28. "Owners" means more than one Owner.

Stipulation 1.1.1.29. "Parent" means a Person or Business Entity whose direct or indirect legal or beneficial ownership interest in, or with respect to, a Transferee or Lessee enables that Person or Business Entity to control the Transferee's or the Lessee's management or policies.

Stipulation 1.1.1.30. "Parents" means more than one Parent.

Stipulation 1.1.1.31. "Person" means a natural person.

Stipulation 1.1.1.32. "Persons" means more than one Person.

Stipulation 1.1.1.33. "Pipeline" means all the facilities including Related Facilities of a total system of pipe (whether owned or operated under a contract, agreement, or lease) used by a carrier for transportation of crude oil, natural gas, or products for delivery, for storage, or for further transportation, and including all pipe, pump or compressor stations, station equipment tanks, valves, access roads, bridges, airfields, terminal and

terminal facilities, including docks and tanker loading facilities, operations control center for both the upstream part of the pipeline and the terminal, tanker ballast treatment facilities, and fire protection system, communication system, and all other facilities used or necessary for an integral line of pipe, taken as a whole, to effectuate transportation, including an extension or enlargement of the line.

Stipulation 1.1.1.34. "Pipeline Coordinator" means the authorized representative of the Commissioner of Natural Resources delegated the authority and responsibility of administering a portion or all of the provisions of this Lease. In the event the Commissioner has not delegated authority or responsibility, the Commissioner shall act as the Pipeline Coordinator.

Stipulation 1.1.1.35. "Preliminary Design" means the establishment of project criteria (i.e., construction, including design, and operational concepts) necessary to delineate the project to be constructed. As a minimum it includes the following: design criteria and project concepts; evaluation of field data used to establish the design criteria; drawings showing functional and technical requirements; reports of all test data compiled during the data collection and preliminary design evaluation; standard drawings (if applicable) or drawings to support structural design concepts of each typical facility or structure; proposed Construction Modes; outline project specifications; sample computations to support the design concepts and bases for project siting.

Stipulation 1.1.1.36. "Related Facilities" means those structures, devices, and improvements and the sites therefor, the substantially continuous use of which is necessary for the operation or maintenance of the Oil transportation pipeline, including:

- (1) line pipe and supporting structures;*
- (2) valves and other control devices, and structures housing them;*
- (3) monitoring and communications devices, and structures housing them;*
- (4) surge and storage tanks, and related containment structures;*
- (5) bridges;*
- (6) terminals, including associated buildings, heliports, structures, yards, docks, and fences;*
- (7) a fuel transporting facility and electrical power lines necessary to serve the Pipeline;*
- (8) retaining walls, berms, dikes, ditches, cuts and fills, including hydraulic control structures;*
- (9) storage buildings and structures, and areas for storage of supplies and equipment;*
- (10) administrative buildings;*
- (11) cathodic protection devices;*
- (12) mechanical refrigeration equipment; and*
- (13) such other facilities as the Pipeline Coordinator shall determine to be Related Facilities.*

Stipulation 1.1.1.37. "Related Facilities" not authorized by this Lease include roads and airports. Authorizations for such Related Facilities may be given by other instruments.

Stipulation 1.1.1.38. "Related Facility" means any one of the Related Facilities.

Stipulation 1.1.1.39. "State Land" means State land as defined in AS 38.05.365; public land of the United States selected by the State under Sec. 6 of the Alaska Statehood Act of 1958 (PL 85-508; 72 Sec. 399), as amended; real property of the United States transferred to the State under Secs. 21, 35 and 45 of the Alaska Omnibus Act of 1959 (PL 86-70; 73 Sec. 141), as amended; "Category I(C) Lands" as those lands are defined in Exhibit E hereto; and any interest owned or hereafter acquired by the State in land.

Stipulation 1.1.1.40. "Stipulation" means any one-of the Stipulations.

Stipulation 1.1.1.41. "Subsidiaries" means more than one Subsidiary.

Stipulation 1.1.1.42. "Subsidiary" means a Business Entity, the management and policies of which are controlled by a Parent directly or indirectly through one or more intermediaries.

Stipulation 1.1.1.43. "Termination" means all activities connected with the expiration, cancellation, or completion of use of the Right-of-Way.

Stipulation 1.1.1.44. Terms defined elsewhere in this Lease:

<u>Term</u>	<u>Page</u>
<i>Effective Date</i>	<i>1</i>
<i>Fish Spawning Beds</i>	<i>A-23</i>
<i>Fish Rearing Areas</i>	<i>A-23</i>
<i>Oil Spill Control</i>	<i>A-27</i>
<i>Operating Agreement</i>	<i>24</i>
<i>Operational Design Level</i>	<i>A-31</i>
<i>Original Lessees</i>	<i>1</i>
<i>Ownership Agreements</i>	<i>24</i>
<i>Pipeline</i>	<i>2</i>
<i>Put-to-Bed</i>	<i>A-16</i>
<i>Right-of-Way²</i>	
<i>Standard Project Flood</i>	<i>A-32</i>
<i>State</i>	<i>1</i>
<i>Stipulations</i>	<i>26</i>
<i>Thaw Stable Sand and Gravel</i>	<i>A-29</i>
<i>Waste</i>	<i>A-21</i>

Scope

This stipulation applies during all phases of TAPS.

Summary

All the stipulation subsections under 1.1 are definitions used in the lease.

Compliance

There are no compliance issues related to Stipulation 1.1.

STIPULATION 1.2. RESPONSIBILITIES

Stipulation 1.2.1. Except where the approval of the Pipeline Coordinator is required before Lessees may commence a particular operation, neither the state nor any of its agents or employees agrees, or is in any way obligated, to examine or review any plan, design, specification, or other document which may be filed with the Pipeline Coordinator by Lessees pursuant to these Stipulations.

Stipulation 1.2.2. The absence of any comment by the Pipeline Coordinator or any other agent or employee or contractor of the State with respect to any plan, design, specification, or other document which may be filed by Lessees with the Pipeline Coordinator shall not be deemed to represent in any way whatever any assent to, approval of, or concurrence in such plan, design, specification, or other document or of any action proposed therein.

Stipulation 1.2.3. With regard to the construction, Operation, maintenance and Termination of the Pipeline: (1) Lessees shall ensure full compliance with the provisions of this Lease including these Stipulations, by their agents, employees and contractors (including subcontractors of any tier), and the employees of each of them. (2) Unless clearly inapplicable, the requirements and prohibitions imposed upon Lessees by these Stipulations are also imposed upon each Lessee's agents, employees, contractors, and subcontractors, and the employees of each of them. (3) Failure or refusal of a Lessee's agents, employees, contractors, subcontractors, or their employees to comply with these Stipulations shall be deemed to be the failure or refusal of the Lessee. (4) Each Lessee shall require its agents, contractors and subcontractors to include these Stipulations in all contracts and subcontracts which are entered into by any of them, together with a provision that the other contracting party, together with its agents, employees, contractors and subcontractors, and the employees of each of them, shall likewise be bound to comply with these Stipulations.

Stipulation 1.2.4. Lessees shall make separate application, under applicable statutes and regulations, for authorization to use or occupy State Land in connection with the Pipeline where the lands are not within the Right-of-Way granted by this Lease.

Scope

This stipulation applies during all phases of TAPS.

Summary

Subsections (1.2.1 – 1.2.4) set forth certain requirements for the Lessees. The Lessees shall ensure full compliance with the lease by their agents, employees, contractors, and subcontractors. Significant or repeated noncompliance with provisions, whether by the Lessees or their agents, employees, contractors, subcontractors, or employees of the any of them of one or more provisions of this lease that the State Pipeline Coordinator determines could reasonably have been prevented is evidence of noncompliance with this stipulation.

Lessees shall require their agents, contractors, and subcontractors to include these stipulations in all contracts and subcontracts for work, services, and materials directly affecting Trans-Alaska Pipeline “Related Facilities” which are entered into by any of them, together with a provision that the other contracting party, together with its agents, employees, contractors, and subcontractors, and the employees of each of them, shall likewise be bound to comply with these stipulations.

In addition, Lessees shall apply for necessary land use authorizations for TAPS-related use or occupation of State lands outside the TAPS Right-of-Way.

Compliance

There are no compliance issues related to stipulation 1.2. JPO Assessment, ANC-02-A-007, summarizes JPO activities related to this requirement. Stipulations 1.2.1 and 1.2.2 are administrative provisions of the lease that do not require active, continuous compliance monitoring or verification. The second and third elements of stipulation 1.2.3 help define the Lessees responsibilities under the first element. Failure of the Lessees agents, employees, contractors, or subcontractors to comply with any part of the lease may be used as evidence of the Lessees failure to comply with stipulation 1.2.3.

For the period 1997-2001, the JPO CMP database references one assessment and six surveillances related to stipulation 1.2. A total of 21 attributes were examined. There were no findings identified for stipulation 1.2.

Alyeska compliance with stipulation 1.2.3 is dependent on communicating lease requirements to employees and contractors. JPO observations indicated that lease requirements could be more effectively communicated to employees and contractors. JPO observations also indicated that managers have not always known that deferring projects was correlated to deferring compliance with lease requirements. To address this issue, JPO and Alyeska have agreed in writing (Memorandum of Agreement (MOA) between Alyeska and JPO, February 28, 2002) to maintain a reference database called GL-2 (described in more detail under stipulation 1.18), which will include JPO-endorsed interpretations of the lease along with Alyeska’s method of compliance

A second aspect of stipulation 1.2.3 compliance is effective corrective action. JPO has determined that Alyeska reasonably detects most deficiencies but correction of moderate to low risk issues has often been deferred. The same MOA (February 28, 2002) provides both interim and long-term approaches to improving corrective action management.

To ensure compliance with this and other requirements, JPO and Alyeska land and permit staffs meet monthly to review project status and to facilitate timely issuance of required permits and authorizations.

STIPULATION 1.3. PIPELINE COORDINATOR

Stipulation 1.3.1. For purposes of information and review, the Pipeline Coordinator may call upon Lessees at any time to furnish any or all data related to pre-construction, construction, operation, maintenance and termination activities undertaken in connection with the Pipeline.

Stipulation 1.3.2. The Pipeline Coordinator may require Lessees to make such modification of the Pipeline on State Land without liability or expense to the State, as he deems necessary to: protect or maintain stability of geologic materials; protect or maintain integrity of the Pipeline; prevent serious and irreparable harm to the environment (including but not limited to water and air quality, fish or wildlife populations, or their habitats); or remove hazards to public health-and safety.

Scope

This stipulation applies to all TAPS records and documents in the possession of the Lessees during all phases of TAPS. It also applies to the State Pipeline Coordinator ordered modifications during all phases of TAPS.

Summary

Lessees shall furnish pipeline system records and documents data to the State Pipeline Coordinator whenever requested. Requests shall not be unreasonably delayed or denied. No active compliance monitoring is required, however Lessees could be in noncompliance if they do not furnish records and documents as called upon by the State Pipeline Coordinator and do not provide access to relevant documents or records for the State Pipeline Coordinator to inspect and copy which Lessees are required by the lease to make or maintain.

Compliance

There are no compliance issues relating to stipulation 1.3.1. JPO Assessment, ANC-02-A-007, summarizes JPO activities related to this requirement. Currently there is no evidence of any outstanding unfulfilled requests from the State Pipeline Coordinator to access documents. All previous inconsistencies concerning document access have been resolved (1999/2000 Construction CMP Report).

Pursuant to stipulation 1.3.2, modifications shall be performed and completed to a schedule approved by the State Pipeline Coordinator. Completed modifications must address the State Pipeline Coordinator's objectives. This stipulation gives authority to the State Pipeline Coordinator to require the Lessees modify the pipeline to prevent serious and irreparable harm to the environment or remove hazards to public health and safety.

Under Stipulation 1.3.2, the State Pipeline Coordinator required the Lessees to make four modifications in 2001:

- The State Pipeline Coordinator authorized Alyeska to discontinue further annual fault monitoring surveys provided Alyeska continued annual surveillance of the aboveground pipe at each of the three identified faults and maintained the position of the pipe on the beams to assure design limits of movement are attainable (JPO Letter No. 01-010-DG, March 16, 2001).
- The State Pipeline Coordinator required a modification to protect and maintain stability of geologic materials and the integrity of the pipeline. The JPO determined glaciers along the TAPS route required special geotechnical consideration. Therefore, the State Pipeline Coordinator required that Alyeska develop specific procedures to monitor Black Rapids, Castner, Fels, Canwell, and Worthington Glaciers. These procedures were required to detect glacier surges. In addition, a special requirement was established requiring Alyeska to implement a contingency plan if a glacier encroached on the pipeline (JPO Letter No. 01-011-DG, March 16, 2001).
- The State Pipeline Coordinator required Alyeska to monitor and maintain structural overfills throughout the life of the pipeline unless it can be shown that conditions have changed. The State Pipeline Coordinator required Alyeska to analyze the possibility of pipe rupture based on pipe or soil instability. Alyeska was also required to conduct a surveillance of structural overfills at 22 locations along TAPS (JPO Letter No. 01-012-DG, March 22, 2001).
- Under authority of Stipulation 1.3.2, the State Pipeline Coordinator required the Alyeska to implement the Earthquake Monitoring System to protect and maintain pipeline integrity, prevent serious and irreparable harm to the environment, and remove hazards to public health and safety. Alyeska was directed to install and maintain a network of ground-motion detectors to continuously monitor, record, and instantly signal the occurrence of ground motion in the vicinity of the pipeline. When a design operating earthquake occurs, the Earthquake Monitoring System must initiate a programmed shutdown of the pipeline, idle the pump stations, and alert the Pipeline Controller. Alyeska was also required to initiate a pipeline shutdown if the leak detection system indicates a leak (JPO Letter No. 01-008-DG, March 8, 2001).

JPO Surveillance Report No. ANC-02-S-022 concluded Lessees have modified and are currently working to modify the pipeline system whenever required by the State Pipeline Coordinator.

STIPULATION 1.4. COMMON AGENT OF LESSEES

Stipulation 1.4.1. Lessees, and each of them, have appointed Alyeska Pipeline Service Company as their common agent to design and construct the Pipeline under and pursuant to an agreement entitled "Agreement for the Design and Construction of the Trans-Alaska Pipeline System," dated August 27, 1970, and intend to appoint Alyeska

Pipeline Service Company as their common agent to operate, maintain and terminate the Pipeline System under and generally pursuant to an Operating Agreement referred to in Section 5.1 of the "Trans-Alaska Pipeline System Agreement," dated August 27, 1970. A Power of Attorney has been filed with the Department of Natural Resources by each Lessee appointing Alyeska Pipeline Service Company the true and lawful agent and attorney-in-fact on behalf of each Lessee with full power and authority to execute and deliver any and all instruments in connection with the design, construction, or operation of the Pipeline. Within the scope of such contractual authority, such agent shall represent Lessees and each of them, with respect to this Lease. Such agent is and shall be empowered on behalf of Lessees, and each of them, to accept service of any process, pleadings or other documents in connection with any court or administrative proceeding relating in whole or in part to this Lease or to all or any part of the Pipeline and to which the State shall be a party.

Stipulation 1.4.2. Lessees shall maintain a common agent for the construction, operation, maintenance and Termination of the Pipeline at all times during the term of this Lease. Such agent shall be a citizen of the United States, or, if a corporation, it shall be duly authorized to conduct business in Alaska. Lessees shall cause such agent to maintain in the City of Anchorage, Alaska, at all times during this Lease an office for the delivery of all documents, orders, notices and other written communications, as provided for in Stipulations 1.4.1 and 1.6.

Stipulation 1.4.3. In the event Lessees substitute a new common agent at any time, Lessees shall give prompt written notice to the Pipeline Coordinator of such substitution, the name and office address in Anchorage, Alaska, of the new agent, and a copy of Lessee's agreement with the new agent. The State shall be entitled to rely on each appointment until as a notice of the substitution of a new common agent takes effect. Each such notice shall not take effect until two (2) full working days after (and not including) the date that it was received by the Pipeline Coordinator.

Stipulation 1.4.4. Upon the Transfer by any Lessee of any right, title or interest of Lessee in the Right-of-Way or this Lease, the Transferee shall promptly execute and deliver to the Commissioner such documents as may be required to evidence the Transferee's appointment and ratification of the then-acting common agent.

Scope

This stipulation applies during all phases of TAPS.

Summary

Stipulation 1.4 is a legal and administrative provision of the lease that does not require active, continuous compliance monitoring. However, each time a transfer of interest occurs, a verification of compliance is required to document each Lessee has appointed Alyeska as their common agent

Compliance

There are no compliance issues related to stipulation 1.4. JPO Assessment, ANC-02-A-007, summarizes JPO activities related to this requirement. JPO Surveillance Report ANC-02-S-022 documented that each current TAPS Owner has a Power of Attorney on file with the Alaska Department of Natural Resources. The Powers of Attorney verify Alyeska Pipeline Service Company is the true and lawful agent and attorney-in-fact on behalf of each Lessee with full power and authority to execute and deliver any and all instruments in connection with the design, construction, or operation of the pipeline.

STIPULATION 1.5. AUTHORITY OF REPRESENTATIVES OF PIPELINE COORDINATOR AND COMMON AGENT; ORDERS OF COMMISSIONER.

Stipulation 1.5.1. No order or notice given to Lessees on behalf of the Pipeline Coordinator or any other Person shall be effective as to Lessees unless prior written notice of the delegation of authority to issue such order or notice has been given to Lessees in the manner provided in Stipulation 1.6.

Stipulation 1.5.2. Lessees shall comply with each and every lawful order directed to them and that is issued by the Pipeline Coordinator or by any duly authorized representative of the Pipeline Coordinator.

Stipulation 1.5.3. Lessees shall cause the common agent of Lessees to maintain a sufficient number of its duly authorized representatives to allow for the prompt delivery to Lessees, or any of them, of all notices, orders and other communications, written or oral, of the Pipeline Coordinator. Each of the said representatives shall be registered with the Pipeline Coordinator, and shall be appropriately identified in such manner and on such terms as the Pipeline Coordinator shall prescribe. Lessees shall cause the common agent of Lessees to consult with the Pipeline Coordinator at any time regarding the number and location of such representatives of the common agent.

Scope

This stipulation applies during all phases of TAPS. This stipulation applies to all orders issued by the State Pipeline Coordinator or the Commissioner of Alaska Department of Natural Resources for the life of the legal relationship, which may extend beyond the Lease. Orders must be issued pursuant to Stipulation 1.6, Orders and Notices. Each order shall be completed to a schedule agreed to by the State Pipeline Coordinator and completed work in response to the order must meet stated objectives. The State Pipeline Coordinator has the authority to extend deadlines for required completion of work under certain circumstances.

Summary

This stipulation requires the Lessee to comply with each and every lawful order directed to them from the State Pipeline Coordinator or duly authorized officer and to maintain a sufficient number of duly authorized representatives to allow for the prompt delivery to Lessees of all notices, orders and other communications, written or oral, of the State

Pipeline Coordinator

Compliance

There are no compliance issues related to stipulation 1.5. JPO Assessment, ANC-02-A-007, summarizes JPO activities related to this requirement. JPO Surveillance Report ANC-02-S-019 concluded that Lessees have complied with all orders issued by the State Pipeline Coordinator in accordance with Stipulation 1.6. JPO issued eleven orders and notices to Alyeska between 1999 and 2000. A more thorough discussion of JPO orders and Alyeska's compliance with those orders is located under stipulation 1.21, Conduct of Operations.

JPO Surveillance Report ANC-02-S-019 also verified that as of March 7, 2002 a current list of authorized representatives (Alyeska Letter No. 02-18302) is on file with the State Pipeline Coordinator.

STIPULATION 1.6. ORDERS AND NOTICES

Stipulation 1.6.1. All decisions, determinations, authorizations, approvals, consents, demands or directions that shall be made or given by the Pipeline Coordinator to any one or more of Lessees in connection with the enforcement or administration of this Lease, or any other agreement, permit or authorization relating in whole or in part to all or any part of the Pipeline shall, except as otherwise provided in Stipulation 1.6.2. of these Stipulations, be in the form of a written order or notice.

Stipulation 1.6.2. If, in the judgment of the Pipeline Coordinator, there is an emergency that necessitates the immediate issuance to any one or more of Lessees of an order or notice, such order or notice may be given orally; provided, however, that subsequent confirmation of the order or notice shall be given in writing as rapidly as is practicable under the circumstances.

Stipulation 1.6.3. All written orders, notices or other written communications, including telegrams, relating to any subject (and, regardless of whether they do or do not relate to the design or construction of the Pipeline) that are addressed to any one or more of Lessees shall be deemed to have been delivered to and received by the addressee or addressees when the order, notice or other communication has been delivered: (1) either by messenger during normal business hours or by means of registered or certified United States mail, postage prepaid, return receipt requested, to the office of the common agent of Lessees at 1815 South Bragaw Street, Anchorage, Alaska 99504, or (2) personally to any authorized representative of the common agent.

Stipulation 1.6.4. All written notices and communications, including telegrams, of any one or more of Lessees that are addressed to the Pipeline Coordinator shall be deemed to have been delivered to and received by the Pipeline Coordinator when the notice or communication has been delivered, either by messenger during normal business hours or by means of registered or certified United States mail, postage prepaid, return receipt requested, to the Pipeline Coordinator personally or to the Office of the Pipeline

Coordinator, First National Bank Building, 425 "G" Street, Suite 750, Anchorage, Alaska 99501.

Stipulation 1.6.5. The State or Lessees by written notice to the other, may change the office address to which written notices, orders, or other written communications may be addressed and delivered thereafter, subject, however, to the provisions of Stipulation 1.4.

Scope

This stipulation applies during all phases of TAPS.

Summary

Stipulation 1.6 specifies the process the State Pipeline Coordinator must follow in the issuance of any orders to the Lessees. This stipulation addresses obligations of State of Alaska and does not require active, continuous compliance monitoring or verification.

Compliance

There are no compliance issues related to stipulation 1.6. JPO Assessment, ANC-02-A-007, summarizes JPO activities related to this requirement.

STIPULATION 1.7. NOTICES TO PROCEED

Stipulation 1.7.1. Permission to construct.

Stipulation 1.7.1.1. Lessees shall not initiate any construction of the Pipeline on State Land without prior written permission of the Pipeline Coordinator. Such permission shall be given solely by means of a written Notice to Proceed issued by the Pipeline Coordinator. Each Notice to Proceed shall authorize construction only as therein expressly stated and only for the particular Construction Segment therein described.

Stipulation 1.7.1.2. The Pipeline Coordinator shall issue a Notice to Proceed only when in his judgment the construction (including design) and operation proposals are in conformity with the provisions of these Stipulations.

Stipulation 1.7.1.3. By written notice, the Pipeline Coordinator may revoke in whole or in part any Notice to Proceed which has been issued when in his judgment unforeseen conditions later arising on State Land require alterations in the Notification to Proceed in order to: protect or maintain stability of geologic materials; protect or maintain integrity of the Pipeline; prevent serious and irreparable harm to the environment (including but not limited to water and air quality, fish, wildlife, or their habitats); or remove hazards to public health and safety.

Stipulation 1.7.1.4. Prior to submission of any Preliminary Designs or applications for any Notice to Proceed, Lessees and the Pipeline Coordinator shall agree to a schedule for the time, scope and quantity of such submissions and applications. The purpose of such schedule is to assure that Lessees' submissions and applications shall be reasonable in scope, and filed in a reasonable time frame, insofar as the workload thereby imposed

on the Pipeline Coordinator is concerned. Submittals and applications shall be filed in accordance with said schedule, and the Pipeline Coordinator may refuse to consider any that are not so filed. The schedule may be reviewed and revised from time to time as may be agreed upon the Lessees and the Pipeline Coordinator.

Stipulation 1.7.2. Preliminary Design Submissions

Stipulation 1.7.2.1. Prior to applying for a Notice to Proceed for any Construction Segment on State Land, Lessees shall submit the Preliminary Design for that Segment to the Pipeline Coordinator for approval. Where appropriate, each submission shall include the criteria which justify the selection of the Construction Modes. The Pipeline Coordinator shall expeditiously review each submission and shall do so within thirty (30) days from the date of his receipt of the submission. The Pipeline Coordinator may request additional information if he deems it necessary.

Stipulation 1.7.2.2. In appropriate cases, the Pipeline Coordinator may waive the requirement that a Preliminary Design be submitted. In this circumstance, Lessees may proceed to apply for a Notice to Proceed in accordance with Stipulation 1.7.4.

Stipulation 1.7.3. Summary Network Analysis Diagram

Stipulation 1.7.3.1. Prior to Final Design submissions, Lessees shall submit a summary network analysis diagram for the entire project to the Pipeline Coordinator. The summary network analysis diagram shall be time-scaled and shall include all activities and contingencies which may reasonably be anticipated in connection with the project. The summary network analysis diagram shall include:

- (1) Data collection activities;*
- (2) Submittal and approval activities;*
- (3) Pre-construction, construction and Post-construction activities; and*
- (4) Other pertinent data.*

Stipulation 1.7.3.2. The summary network analysis diagram shall be updated at thirty (30) day intervals, as significant changes occur or as otherwise approved in writing by the Pipeline Coordinator.

Stipulation 1.7.4. Application for Notice to Proceed

Stipulation 1.7.4.1. Lessees may apply for a Notice to Proceed on State Land for only those Construction Segments for which the Preliminary Design has been approved in writing by the Pipeline Coordinator or a waiver pursuant to Stipulation 1.7.2.2 has been issued in writing by the Pipeline Coordinator.

Stipulation 1.7.4.2. Before applying for a Notice to Proceed for a Construction Segment, Lessees shall, in such manner as shall be acceptable to the Pipeline Coordinator, by survey, locate and clearly mark on the ground the proposed centerline of the line of pipe

to be located in the Mapping Segment on State Land within which the Construction Segment is to be constructed and the location of all Related Facilities proposed to be constructed in the Mapping Segment.

Stipulation 1.7.4.3. Each application for a Notice to Proceed shall be supported by:

- (1) A Final Design.
- (2) All reports and results of environmental studies conducted or considered by Lessees.
- (3) All data necessary to demonstrate compliance with the terms and conditions of these Stipulations with respect to that particular Construction Segment.
- (4) *A detailed network analysis diagram for the Construction Segment, including: Lessees' work schedules; consents, permits or authorizations required by State and Federal agencies and their interrelationships; design and review periods; data collection activities; and construction sequencing. The detailed network analysis diagram shall be updated as required to reflect current status of the project.*
- (5) *A map or maps, prepared in such manner as shall be acceptable to the Pipeline Coordinator, depicting the proposed location in the Mapping Segment within which the Construction Segment is to be constructed of: (1) the boundaries of all contiguous temporary use areas, and (2) all improvements, buried or above-ground, that are to be constructed within the Mapping Segment. The Pipeline Coordinator shall not issue a Notice to Proceed with construction until he has approved all appropriate locations on the ground and temporary boundary markers have been set by Lessees to the satisfaction of the Pipeline Coordinator.*
- (6) *An Oil spill contingency plan and other contingency plans.*
- (7) *Such other data as may be requested by the Pipeline Coordinator either before submission of the application for a Notice to Proceed or at any time during the review period.*

Stipulation 1.7.4.4. The Pipeline Coordinator shall review each application for a Notice to Proceed and all data submitted in connection therewith within ninety (90) days. Said ninety (90) day period shall begin from the later of the following dates:

- (1) Date of receipt by the Pipeline Coordinator of an application for a Notice to Proceed.*
- (2) Date of receipt by the Pipeline Coordinator of the last submittal of additional data pursuant to this Stipulation.*

During review of an application for a Notice to Proceed, the appropriate portion of the route of the Pipeline may be modified by the Pipeline Coordinator and relocated to another position within the General Route if in his judgment the modification is desirable to achieve any of the objectives set forth in Stipulation 1.7.1.3. If, during construction, adverse physical conditions are encountered that were not known to exist, or that were known to exist but their significance was not fully appreciated when the Pipeline Coordinator issued a Notice to Proceed for the portion of the Mapping Segment in which

the physical conditions are encountered, the Pipeline Coordinator may authorize deviations from the initially approved location of the Pipeline to another location within the General Route of the Pipeline at the point or points where the physical conditions are encountered, including adequate room for structurally sound transition. A deviation shall not be constructed without the prior written approval of the Pipeline Coordinator and, if so approved, shall conform in all respects to the provisions of the approval.

Stipulation 1.7.4.5. If the Pipeline Coordinator requires Lessees to submit additional data on one or more occasions, the review period shall begin from the date of receipt by the Pipeline Coordinator of the last submittal.

NOTE: JPO Letter No. 97-074-JS to the Alyeska (October 7, 1997) clarified what activities require a Notice to Proceed (NTP). An NTP is needed when construction requires new right-of-way or when a construction project directly affects a Design Basis change to Integrity I-1 components.

Scope

This stipulation applies to construction during all phases of TAPS including reroute of the pipeline.

Summary

Stipulation 1.7.1 requires the lessee to obtain a written Notice to Proceed (NTP) prior initiating any construction of the pipeline on state land (reference the above Note for clarification of activities subject to the NTP process). However, stipulations 1.7.2 and 1.7.3 require the submission of a preliminary design and summary network analysis diagram prior to applying for an NTP. Stipulation 1.7.4 sets forth the supporting information that must be included with a NTP application.

Compliance

There are no compliance issues related to stipulations 1.7. The JPO CMP database referenced 11 oversight reports (one assessment, three technical reports and seven surveillances) related to stipulation 1.7. A total of 48 attributes were examined. There was one finding associated with this stipulation, which has been closed.

Between late 1996 and 2002, JPO reviewed and approved thirty NTPs. The State Pipeline Coordinator approved thirteen, the Federal Authorized Officer approved eleven and the State Pipeline Coordinator and Authorized Officer approved six jointly. The successful use of the NTP process on 30 separate occasions between 1996 and 2002 supports the JPO determination that Alyeska has fulfilled the requirements related to stipulation 1.7.

STIPULATION 1.8. CHANGES IN CONDITIONS

Stipulation 1.8.1. Unforeseen conditions arising during construction, operation, maintenance or Termination of the Pipeline may make it necessary to revise or amend these Stipulations to control or prevent damage to the environment or hazards to public-

health and safety. In that event, Lessees and the Pipeline Coordinator shall agree as to what revisions or amendments shall be made.

Scope

This stipulation applies during all phases of TAPS.

Summary

This stipulation allows Alyeska and the State Pipeline Coordinator to revise or amend lease stipulations to control or prevent damage to the environment of hazards to public health and safety.

Compliance

There are no compliance issues related to stipulation 1.8. JPO Assessment, ANC-02-A-007, summarizes JPO activities related to this requirement. Stipulation 1.8 is a legal and administrative provision of the lease that does not require active, continuous compliance monitoring or verification. To date, there has not been a modification to state right-of-way lease stipulations.

STIPULATION 1.9. ANTIQUITIES AND HISTORICAL SITES

Stipulation 1.9.1. Lessees shall engage an archeologist approved by the Pipeline Coordinator to provide surveillance and inspection of the Pipeline on State Land for archeological values.

Stipulation 1.9.2. If, in connection with any operation under this Lease, or any other Agreement issued in connection with the Pipeline, Lessees encounter known or previously unknown paleontological, archeological, or historical sites on State Land, Lessees shall immediately notify the Pipeline Coordinator and said archeologist. Lessees' archeologist shall investigate and provide an on-the-ground opinion regarding the protection measures to be undertaken by Lessees. The Pipeline Coordinator may suspend that portion of Lessees' operations necessary to preserve evidence pending investigation of the site.

Stipulation 1.9.3. Six copies of all survey and excavation reports shall be filed with the Pipeline Coordinator.

Scope

This stipulation applies during all phases of TAPS.

Summary

The ROW, work pad, access roads and material sites require archeological surveys prior to groundbreaking activities. During pre-construction and construction of TAPS, archeological surveys were accomplished according to grant/lease requirements. Post construction activities that involve land outside the right of way receive historical or antiquities (cultural) clearance as appropriate through permitting. It is the responsibility of the Lessees to engage an archeologist to provide surveillance and inspection of the

Pipeline and investigate any subsequent encounters with paleontological, archeological or historic sites. Any subsequent reports need to be filed with the State Pipeline Coordinator.

Compliance

The State Historical Preservation Office (SHPO) has provided the JPO with a compliance report that also finds Alyeska in compliance with relevant State of Alaska regulations and statutes Attachment 2).

There are no compliance issues related to stipulation 1.9. The JPO CMP database references two oversight reports (two surveillances) related to stipulation 1.9. A total of six attributes were examined. No compliance findings were associated with this stipulation.

Pursuant to stipulation 1.9.1, Alyeska appointed an archaeologist (Alyeska Letter No. 01-17784, October 23, 2001) and the appointment was subsequently approved by the State Pipeline Coordinator (JPO Letter No. 01-176-DG, December 10, 2001). The JPO has not received any reports or communications of any encounters with known or previously unknown paleontological, archeological, or historical sites. Nor is there any indication that JPO should have been contacted (stipulation 1.9.2). Alyeska documented knowledge of the requirement to file six copies of all survey and excavation reports with the JPO (Alyeska Letter No. 01-17784, October 23, 2001) (stipulation 1.9.3).

STIPULATION 1.10. COMPLETION OF USE

Stipulation 1.10.1. Upon completion of the use of all, or a very substantial part, of the Right-of-Way or other portion of the Pipeline on State Land, Lessees shall promptly remove all improvements and equipment, except as otherwise approved in writing by the Pipeline Coordinator and shall restore the land to a condition that is approved by the Pipeline Coordinator or at the option of Lessees pay the cost of such removal and restoration. The satisfaction of Pipeline Coordinator shall be stated in writing. Where approved in writing by the Pipeline Coordinator, buried pipe may be left in place, provided all Oil and residue are removed from the pipe and the ends are suitably capped.

Stipulation 1.10.2. All areas that do not constitute all, or a very substantial part of the Right-of-Way or other portion of the Pipeline, utilized pursuant to authorizations issued in connection with the Pipeline, shall be "put-to-bed" by Lessees upon completion of their use unless otherwise directed by the Pipeline Coordinator. "Put-to-bed" is used herein to mean that Access Roads, material sites and other areas shall be left in such stabilized condition that erosion will be minimized through the use of adequately designed and constructed waterbars, revegetation and chemical surface control; that culverts and bridges shall be removed by Lessees in a manner satisfactory to the Pipeline Coordinator, and that such roads, sites and areas shall be closed to use. Lessees rehabilitation plans shall be approved in writing by the Pipeline Coordinator prior to termination of use of any such road, or any part thereof, in accordance with Stipulation 2.12.

Scope

This stipulation applies during all phases of TAPS.

Summary

Upon completion of use of all, or a very substantial part, of the Pipeline, Lessees shall promptly remove all TAPS-related facilities and equipment and restore the lands, or pay the cost of removal and restoration, to a condition approved in writing by the State Pipeline Coordinator.

Compliance

There are no compliance issues related to stipulation 1.10. JPO Assessment, ANC-02-A-007, summarizes JPO activities related to this requirement. There has been no use appropriate to this requirement (1.10.1) during this or prior CMP work planning cycle. Consequently, no monitoring has been conducted and no subordinate CMP assessment or report has been published. No review of post construction (1977-1978) authorizations was conducted.

STIPULATION 1.11. PUBLIC IMPROVEMENTS

Stipulation 1.11.1. Lessees shall protect existing telephone, telegraph and transmission lines, roads, trails, fences, ditches and like improvements during construction, operation, maintenance and Termination of the Pipeline. Lessees shall not obstruct any road or trail with logs, slash, or debris. Damage caused by Lessees to public utilities and improvements shall be promptly repaired by Lessees to a condition which is satisfactory to the Pipeline Coordinator.

Scope

This stipulation applies to all existing telephone, telegraph and transmission lines, roads, trails, fences, ditches and like improvements during all phases of TAPS.

Summary

This stipulation requires the Lessees to provide protection to existing public improvements that may be adversely affected by pipeline activities. In addition, the Lessees shall not obstruct any road or trail with slash, logs or debris.

Compliance

There are no compliance issues related to stipulation 1.11. JPO Technical Report, FBU-01-E-001, Revision 1 summarizes JPO activities related to this requirement.

The JPO CMP database references five oversight reports (three surveillances and two technical reports) related to stipulation 1.11. A total of 10 attributes were examined. No compliance findings were associated with this stipulation.

In the summer of 2001, the JPO conducted a line-wide inspection of all 284 access roads. During these inspections, no compliance issues related to stipulation 1.11 were observed (ADNR Memorandum from Pritchard to File, April 23, 2002).

STIPULATION 1.12. REGULATION OF PUBLIC ACCESS

Stipulation 1.12.1. During construction or Termination activities, Lessees may regulate or prohibit public access to or upon any Access Road on State Land being used for such activity. At all other times, Lessees shall permit free and unrestricted public access to and upon Access Roads, except that with the written consent of the Pipeline Coordinator, Lessees may regulate or prohibit public access and vehicular traffic on Access Roads as required to facilitate operations or to protect the public, wildlife and livestock from hazards associated with operation and maintenance of the Pipeline. Lessees shall provide appropriate warnings, flagmen, barricades, and other safety measures when Lessees are using Access Roads, or regulating or prohibiting public access to or upon Access Roads.

Stipulation 1.12.2. During construction of the Pipeline, Lessees shall provide alternative routes for existing roads and trails on State land as determined by the Pipeline Coordinator whether or not these roads or trails are recorded.

Stipulation 1.12.3. Lessees shall make provisions for suitable permanent crossings for the public where the Right-of-Way or Access Roads cross existing roads, foot-trails, x-winter trails, or other rights-of-way.

Stipulation 1.12.4. After completion of construction of the Pipeline, and with the concurrence of Lessees, the Pipeline Coordinator may designate areas of the Right-of-Way to which the public shall have free and unrestricted access.

Scope

This provision applies during all phases of TAPS and to existing roads, trails, and other rights-of-way crossed by the TAPS Right-of-Way or Access Roads.

Summary

This stipulation requires the Lessee to provide free and unrestricted access to and upon the roads (except during construction and termination activities), subject to restrictions approved by the Commissioner. The Lessee shall also make provisions for permanent public crossings for existing roads and trails and other areas designated by the State Pipeline Coordinator for the public to have free and unrestricted access.

Compliance

There are no compliance issues related to 1.12. JPO Assessment ANC-01-A-016 summarizes activities related to stipulation 1.12. The JPO CMP database references 307 oversight reports (two assessments, one technical report and 304 surveillances) related to stipulation 1.12. A total of 315 attributes were examined. No compliance findings were associated with this stipulation.

In the summer of 2001, the JPO conducted a line-wide inspection of all 284 access roads. In addition, the state case-file for each road was reviewed (JPO Assessment ANC-01-A-016). Eighteen state roads are open to the public and 77 roads are closed (gated). The

State Pipeline Coordinator is authorized to restrict access on these roads. The JPO case-files contain authorizations for each of the closed roads. On October 1, 2001, the JPO authorized Alyeska to secure and lock all the gates leading to the pipeline right-of-way until February 28, 2002 due to the national security situation prompted by the events of September 11, 2001. On February 15, 2002 Alyeska requested, in writing, continued closure of these roads until November 30, 2002. The State Pipeline Coordinator approved this request.

The Alyeska TAPS Environmental Atlas and Revised Statute (RS) 2477 documents (DNR computerized Land Administration System, status plats, and the TAPS title reports) were examined to determine if any roads, trails or rights-of-way or cultural resources existed. When these attributes were identified, they were noted on surveillance checklists. No instances were found during the 2001 inspections where the right-of-way or access roads preclude the use of the existing roads, foot-trails, winter trails or other rights-of-way.

STIPULATION 1.13. ELECTRONICALLY OPERATED DEVICES

Stipulation 1.13.1. Lessee shall screen, filter, or otherwise suppress any electronically operated devices that are installed as part of the Pipeline which are capable of producing electromagnetic interference radiations so that such devices will not adversely affect the functioning of existing communications systems or navigational aids. In the event that structures such as towers or buildings are to be erected as a part of the Pipeline, their positioning shall be such that they will not obstruct radiation patterns of line-of-sight communications systems, navigational aids, or similar systems.

Scope

This applies during all phases of TAPS.

Summary

This stipulation addresses all pipeline system electronically operated devices and to all structures that are part of the pipeline system and could affect communications systems, navigational aids, or similar systems existing at the time of the introduction or use of the electronically operated devices and structures.

Compliance

There are no compliance issues related to 1.13. JPO Technical Report FBU-01-E-003, Revision 1, summarizes JPO activities related to stipulation 1.13. The JPO CMP database references 3 oversight reports (one technical report and two surveillances) related to stipulation 1.12. A total of 5 attributes were examined. No compliance findings were associated with this stipulation.

Technical Report FBU-01-E-003 concluded that equipment capable of creating interference with existing communication systems and navigational aids are shielded to suppress electromagnetic emissions. New installations are accomplished in accordance with TAPS Engineering Manual, PM 2001 and maintained by FCC licensed personnel.

Interviews conducted with SCADA (Alyeska communications) and AT&T Alascom personnel indicated no instance of communications obstruction within the last 5 years.

Alyeska is in the process of upgrading the existing communications system. More detail on this project is provided under stipulation 1.18.

STIPULATION 1.14. CAMPING, HUNTING, FISHING AND TRAPPING

Stipulation 1.14.1. Lessees shall post the Right-of-Way against camping, hunting, fishing, trapping and shooting within the Right-of-Way. Lessees shall prohibit their employees, agents, contractors, subcontractors, and their employees, from engaging in such activities.

NOTE: JPO recently clarified the requirements of stipulation 1.14.1. The State Pipeline Coordinator specified the following:

“This letter shall serve to clarify the requirements associated with stipulation 1.14.1, posting the right-of-way (ROW) against camping, hunting, fishing, and trapping. The JPO interprets this stipulation to apply to Alyeska employees, agents, contractors, sub-contractors, and their employees while they are on-duty or on-shift. Off-duty employees, off-shift employees, and members of the general public are not subject to these restrictions.

Placement of existing Alyeska posters at conspicuous locations in all facilities shall serve to fulfill the requirement to post the ROW. All other signs addressing this stipulation must be removed by July 31, 2002.”

Stipulation 1.14.2. Lessees shall inform their employees, agents, contractors, subcontractors, and their employees, of applicable laws and regulations relating to hunting, fishing, and trapping.

Scope

This stipulation applies to camping, hunting, fishing, trapping, and shooting within the TAPS right-of-way during all phases of TAPS by all listed employees. It also applies to all listed employees during all phases of TAPS, and to all applicable federal, State, and local laws and regulations related to hunting, fishing, and trapping near TAPS.

Summary

This stipulation specifies when Lessees employees, agents, contractors, subcontractors, and their employees may hunt, fish, camp or trap within the ROW. It also requires the Lessees to inform employees of current hunting, fishing and trapping laws and regulations.

Compliance

There are no compliance issues related to stipulation 1.14. JPO Technical Report, FBU-01-E-007, Revision 1, summarizes JPO activities related to this requirement. For the period 1997-2001, the JPO CMP database referenced two technical reports and four surveillances related to stipulation 1.14. A total of 13 attributes were examined. There were no findings associated with this stipulation.

Additional monitoring to evaluate compliance with the requirements noted above is scheduled in the 2002 JPO Work Plan.

STIPULATION 1.15. SMALL CRAFT PASSAGE

Stipulation 1.15.1. The creation of any permanent obstruction to the passage of small craft in streams is prohibited.

Scope

This provision is applicable to all waterbodies passable to small watercraft and to all Lessee activities during all phases of TAPS.

Summary

This stipulation prohibits the creation of any permanent obstruction to the passage of small craft in streams.

Compliance

There are no compliance issues related to 1.15. JPO Technical Report, FBU-01-E-004, Revision 1 summarizes JPO activities related to this requirement. The assessment indicated, based on a sample of nine observations, there are no permanent obstructions to small craft passage.

Stipulation 1.15.1 provided an important design basis for pipeline construction. Design approval of bridges and crossings addressed small craft passage needs and insured compliance with this stipulation. Current requirements for construction of any permanent structure require approval by the State Pipeline Coordinator pursuant to stipulation 1.7.

STIPULATION 1.16. PROTECTION OF SURVEY MONUMENTS

Stipulation 1.16.1. Lessees shall mark and protect all geodetic survey monuments encountered on State Land during the construction, operation, maintenance and Termination of the Pipeline. These monuments are not to be disturbed; however, if such a disturbance occurs, the Pipeline Coordinator shall be immediately notified thereof in writing.

Stipulation 1.16.2. If any land survey monuments, corners, or accessories (excluding geodetic survey monuments) on State Land are destroyed, obliterated or damaged, Lessees shall employ a qualified land surveyor to reestablish or restore them in accordance with the "Manual of Instruction for the Survey of Public Lands" and shall

record such survey in the appropriate records. Additional requirements for the protection of monuments, corners, and bearing trees may be prescribed by the Pipeline Coordinator.

Scope

Stipulation 1.16 applies to land survey monuments, corners, and accessories and geodetic survey monuments on state land throughout the pipeline system during all phases of TAPS.

Summary

This stipulation requires the Lessees to protect all survey monuments encountered on state land. If any survey monuments are going to be disturbed the Lessees must notify the State Pipeline Coordinator in writing and receive written instructions for replacement. Any survey monuments damaged or destroyed inadvertently must be restored according to procedures set forth in the stipulation.

Compliance

There are no compliance issues related to stipulation 1.16. For the period 1997-2001, The JPO CMP database contains reference to two technical reports and five surveillances related to stipulation 1.16. A total of six attributes were examined. There were no findings identified for this stipulation.

JPO Technical Report No. FBU-01-E-008, Revision 1 concluded there is no evidence Alyeska has intentionally damaged, obliterated or destroyed any public land survey monument. (The JPO Technical Report relied on results from the Det Norske Veritas (DNV) (Appendix D) external audit and Alyeska's internal audit to evaluate compliance with stipulation 1.16)

The DNV Progress Review Report (10561-C March 2001) conducted for Alyeska indicated that there was evidence survey monuments were damaged or destroyed and have not been restored. It was not clear, depending upon the type of survey monument whether there was a need to notify JPO.

In response to the DNV audit finding, Alyeska conducted an internal compliance review and confirmed that land survey or cadastral survey monuments that delineate land boundaries are missing for a variety of reasons including permafrost influence, erosion or other environmental conditions, third party equipment operation, Alyeska equipment operation, or by the general public. Alyeska proposed the following measures to establish compliance with stipulation 1.16:

- Repair or replace land survey monuments damaged by TAPS activities;
- Replace missing land survey or centerline survey monument when needed for TAPS maintenance purposes;
- Replace or assist in the replacement of any individual survey monument of any type within or adjacent to the ROW when requested by the State Pipeline Coordinator.

The JPO concurred with Alyeska's proposed policy (JPO Letter No. 01-190-DG, December 20, 2001) stating the following:

“The Joint Pipeline Office concurs with your policy of avoiding, protecting, and replacing survey monuments as described in your Letter No. 01-17913, dated November 26, 2001. It is acceptable for compliance with the requirements of Stipulation 1.16, Protection of Survey Monuments.

Additionally, your agreement to replace or assist in the replacement of survey monuments of any type within or adjacent to the Right-of-Way, when requested by the Authorized Officer or State Pipeline Coordinator, will meet the requirements of Stipulation 1.16.2.

Future surveillance activities will be conducted to verify Alyeska's compliance with these commitments.”

The 2002 JPO Work Plan includes field monitoring to specifically address these new requirements as well as conduct additional inspections of land survey monuments.

STIPULATION 1.17. FIRE PREVENTION AND SUPPRESSION

Stipulation 1.17.1. Lessees shall promptly notify the Pipeline Coordinator of fires on State Land and take all measures necessary or appropriate for the prevention and suppression thereof. Lessees shall comply with the instructions and directions of the Pipeline Coordinator concerning the use, prevention and suppression of fires. Use of open fires in connection with construction of the Pipeline is prohibited unless authorized in writing by the Pipeline Coordinator.

Scope

This stipulation applies during all phases of TAPS.

Summary

This stipulation requires the Lessees to promptly notify the State Pipeline Coordinator of any fires on state land. The stipulation requires the Lessees to take all necessary measures to prevent and suppress fires and to comply with the instructions and directions of the State Pipeline Coordinator.

Compliance

The State Pipeline Coordinator's Office staff includes a representative from the State Fire Marshal's Office. The State Pipeline Coordinator relies on this expertise for issues involving the prevention and suppression of fires on state land. In addition to stipulation compliance monitoring, the State Fire Marshal's Office has prepared a report that finds Alyeska in compliance with relevant state and federal laws (Attachment 2).

There are no Lease compliance issues related to stipulation 1.17. For the period 1997-2001, The JPO CMP database contains reference to two assessments, four technical reports and 16 surveillances related to stipulation 1.17. A total of 64 attributes were examined. There were two findings identified for this stipulation, both of which are closed.

The most significant fir since 1997 was the June 1999 Donnelly Flats Wildland fire that threatened Pump Station 9. Two surveillance reports, JPO-99-S- 059 and the follow-up JPO-00-S-019, document Alyeska's response to the Donnelly Flats Wildfire. The surveillances did not issue any compliance findings, however, two observations (i.e., recommendations) resulted: 1) that the lessons learned from Alyeska's internal report be incorporated into the appropriate Alyeska manual; and 2) that sprinklers be available for supplemental protection of buildings. The second surveillance verified Alyeska's follow-through on these recommendations.

STIPULATION 1.18. SURVEILLANCE AND MAINTENANCE

Stipulation 1.18.1. During the construction, operation, maintenance and Termination of the Pipeline, Lessees shall conduct a surveillance and maintenance program applicable to the subarctic and arctic environment. This program shall be designed to: (1) provide for public health and safety; (2) prevent damage to natural resources; (3) prevent erosion; and (4) maintain Pipeline integrity.

Stipulation 1.18.2. Lessees shall have a communication system that ensures the transmission of information required for the safe operation of the Pipeline.

Stipulation 1.18.3. Lessees shall maintain complete and up-to-date records on construction, operation, maintenance and termination activities performed in connection with the Pipeline. Such records shall include surveillance data, leak and break records, necessary operational data, modification records and such other data as the Pipeline Coordinator may require.

Stipulation 1.18.4. Lessees shall provide and maintain Access Roads and airstrips, the number and location of which shall be approved by the Pipeline Coordinator, to ensure that Lessees' maintenance crews and Federal and State representatives shall have continuing access to the Pipeline.

Scope

This stipulation applies during all phases of TAPS. The term "surveillance and maintenance program" is interpreted broadly and not limited by Alyeska's common use of these terms or their manuals.

Summary

This stipulation requires the Lessees to conduct a surveillance and maintenance program that is applicable to the subarctic and arctic environment. The section further identifies some specific programs that must be included in the surveillance and maintenance

program (provide for public health and safety; prevent damage to natural resources; prevent erosion; and maintain pipeline system integrity). The stipulation also requires the Lessees to have a communication system that ensures the transmission of information required for the safe operation of the pipeline system and to maintain complete and up-to-date records on all phases of pipeline activities. In addition, the stipulation requires the Lessees to provide and maintain access roads and airstrips.

Compliance

There are no compliance issues related to Stipulation 1.18 that have not been addressed to the satisfaction of the State Pipeline Coordinator. JPO Assessment FBU-02-A-001 summarizes JPO activities related to this requirement. For the period 1997-2001, the JPO CMP database referenced 262 oversight reports (nine assessments, 40 technical reports and 213 surveillances) related to stipulation 1.18. A total of 1,820 attributes were examined. There were 34 findings identified, three of which remain open.

Stipulation 1.18 requirements provide the basis for compliance with many other general, environmental and technical stipulations. For example, JPO finding JPO-99-S-066-F/01 was identified under stipulation 2.4, Erosion Control. The root cause of the finding, however, was related to Alyeska's surveillance and monitoring program, a stipulation 1.18 requirement. Resolution of the finding was more appropriately tracked under stipulation 1.18, not stipulation 2.4 where it was initially identified. Since stipulation 1.18 is directly related to many other lease requirements, including section 22 requirements to prevent and abate, the JPO has allocated significant resources over the past several years to ensure compliance with this stipulation.

A significant result of these oversight efforts was the February 28, 2002 Memorandum of Agreement (MOA) between the JPO and Alyeska (Appendix F). The MOA establishes the programmatic changes Alyeska will implement to address current compliance issues as well as ensure future compliance with lease requirements. The MOA specifically addresses stipulation 1.18 issues that in turn directly effect compliance with other lease requirements. Alyeska has agreed to:

- Complete and publish the Grant and Lease Compliance Manual, GL-2 and associated compliance process by April 15, 2002 (this has been completed),
- By April 2002, Provide JPO with a final plan for improvement of the TAPS regulatory compliance process (this has been completed),
- Identify additional improvements to the corrective action process that will increase the efficiency and effectiveness of the current process by April 15, 2002 (reference April 3, 2002 Alyeska Systems Renewal Team Powerpoint presentation to the Authorized Officer and State Pipeline Coordinator titled "Management Actions and Commitments (MAC) Process Recommendations")

In the MOA, Alyeska also agreed that the following points should guide compliance with stipulation 1.18.1:

- The corrective action process will use a risk-based prioritization standard (including Grant and Lease compliance and risks to safety, the environment and TAPS integrity) that will appropriately distinguish deficiencies and focus management attention on timely implementation of corrective actions.

- The corrective action process will be compatible with other key work process developed by Systems Renewal.
- The process will include trending of corrective actions.
- The process will use categorization methods that are compatible with the Grant and Lease of ROW agreements.
- The process will include JPO notification twice per year of corrective actions on critical items (as defined by the interpretation for stipulation 1.18.1) that are either deferred beyond their initial due date or are not funded.

Pursuant to the MOA, in February 2002, the State Pipeline Coordinator provided Alyeska with lease section and stipulation performance standards. These standards established compliance criteria for each section and stipulation. Based on these performance criteria, Alyeska developed the corresponding *Grant and Lease Compliance Manual, GL-2*. The purpose of GL-2 is to address the compliance requirements of the state lease of right-of way and federal grant. The manual provides the original language from the grant and lease as well as the State Pipeline Coordinator and Authorized Officer interpretation or clarification of the original language (performance standards) and Alyeska's method of assuring compliance with the agreements.

This is the third JPO CMP work plan cycle that has evaluated Lease Stipulation 1.18 (TAPS Maintenance Program, 1999/2000, January 2001 and TAPS Construction Program 1999/2000, January 2001, An Evaluation of Selected Portions of the TAPS Maintenance Program January 1997-April 1999, Evaluation of Alyeska Pipeline Service Company's Operation of the Trans-Alaska Pipeline System, February 1999, CMP report: A Look at Alyeska Pipeline Service Company's Operation of the Trans-Alaska Pipeline System 1999/2000, February 2001). This stipulation was also addressed in four other CMP reports.

Stipulation 1.18.1. Requires the Lessees to conduct a surveillance and maintenance program applicable to the subarctic and arctic environment. The program shall be designed to: (1) provide for public health and safety; (2) prevent damage to natural resources; (3) prevent erosion; and (4) maintain Pipeline integrity. In addition to stipulation 1.18.1 requirements, DOT regulations (49 CFR 195.412) require that each pipeline operator shall, at intervals not exceeding 3 weeks, but at least 26 times each calendar year, inspect the surface conditions on or adjacent to each pipeline right-of-way. Methods of inspection include walking, driving, flying or other appropriate means of traversing the right-of-way. State of Alaska regulations (18 AAC 75.055(a)(3)) require remote pipelines be inspected weekly by aircraft, except when precluded by weather or safety conditions.

JPO efforts to ensure Alyeska compliance with stipulation 1.18.1 requirements as identified above is comprised of three components:

- First, JPO continues to work with Alyeska on implementation of a Reliability Centered Maintenance (RCM) Program. Alyeska's adoption of RCM is viewed as an effort to comply with the integrity surveillance and maintenance aspects of

Stipulation 1.18.1 (see JPO CMP Report No. 12, TAPS Maintenance & Sustained Useful Life, June 2001).

- Second, 2001 JPO monitoring efforts focused on issue follow-up including recent incidents/events and issues identified in prior JPO monitoring reports.
- Third, JPO reviews Alyeska's System Integrity Monitoring Program reports. These reports cover civil monitoring which includes rivers and flood plains, fuel gas line stability, above ground pipe, below ground pipe, fault monitoring, glacier monitoring, slope stability, facility, bridges, and earthquake response plan as well as corrosion monitoring. These reports often are directly related to requirements in the technical lease stipulations and are a significant part of Alyeska's surveillance program. Review results are discussed under the appropriate stipulation.

Alyeska compliance with lease stipulations is a dynamic process comprised of programs designed to monitor, detect and correct. Currently, JPO is tracking 3 three open compliance findings under Stipulation 1.18.1:

- Operation of the pipeline with the designed safety systems expended (anchor slide assemblies and other pipe movement dampening systems) was not workman like and safe (1.21.1).
- The Surveillance and Maintenance Program failed to detect and locate a significant pipe movement in a timely manner (1.18). The method of conducting the surveillance and maintenance program was not applicable to the sub-arctic environment (1.18.1).
- Pipeline Operators failed to detect a pressure surge that resulted from an improperly positioned valve. The resulting pipe movement adversely impacted pipeline integrity.

These findings were the result of an incident reported in May 2000 at milepost 170 related to hydraulically caused pipe movement. The Alyeska surveillance and monitoring program failed to detect a hydraulic pressure event that caused major pipe movement. Failure to detect the pressure event and pipe movement resulted in this segment of pipeline being operated with the designed safety system expended.

The issue of pipe movement detection and consequences are the subject of a joint JPO/Alyeska Reliability Centered Maintenance (RCM) analysis of the above ground pipe system. RCM is a process used to identify the maintenance needs of a physical asset to ensure operational safety and functional reliability and describes tasks needed to prevent or reduce the likelihood of the particular failure from occurring. The JPO has determined that the RCM approach to surveillance and monitoring will also satisfy the concerns related to stipulation 1.21, Conduct of Operations. The JPO findings related to the Milepost 170 incident will remain open until implementation of the RCM study results.

Stipulation 1.18.2. The State Pipeline Coordinator approved Alyeska's existing communication system. However, Audit Action Item (AAI) 2076, Operation of RGV control system in Triconix mode, is a compliance issue that currently remains open. Closure of AAI 2076 cannot be completed until a communication link with sufficient

bandwidth is established between the pump stations and the remote gate valves along the pipeline. Availability of the bandwidth is dependent on efforts to complete digitization of the current microwave system or the availability of a fiber optics system that meets the necessary communication reliability criteria. At this time, Alyeska is moving toward using the fiber optics line to provide the bandwidth necessary for the master terminal units required to close this audit action item. JPO will close this order when Alyeska commits to a firm schedule for installation and operation of the master terminal units. This schedule is dependent upon Alyeska securing the bandwidth, whether by fiber optics or digital microwave.

As part of the process to upgrade the existing telecommunications system, Alyeska has proposed changes for DB-180, Section 6, Telecommunications (Alyeska Letter No. 02-18436, April 8, 2002). JPO Technical Report No. ANC-02-E-005, Review of Design Basis Revision to DB-180, Section 6, Telecommunications, summarizes an in-depth review of Alyeska's proposed changes. The review found that the proposed Design Basis, Section 6 in all cases is as least as stringent in availability requirements as the original Design Basis. In addition the proposed changes provide a clear separation between criteria and technology, thus allowing greater flexibility for the designer in the future. JPO Technical Report No. ANC-02-E-005 recommends approval of Alyeska's proposed changes to DB-180, Section 6, Telecommunications.

Contingent on State Pipeline Coordinator approval of proposed changes to DB-180, Alyeska has developed a tentative schedule for installation of the new communications system. The schedule identifies several installation phases:

- Digital microwave antennas and radios installed by the end of April 2002.
- Testing of new digital VHF radios and antennas at RGV-73 and 123, June 15, 2002.
- Installation of new satellite Earth Stations at Pump Stations (except Pump Station 2) by the end of November 2002.
- Complete transition from microwave to fiber optic cable and satellite communication system by March 15, 2003.

Stipulation 1.18.3. JPO found Alyeska's document management practices to be inconsistent with the requirements of stipulation 1.18.3 when Alyeska could not demonstrate that it maintained complete and current records on construction and maintenance activities. Alyeska maintenance records only partially documented some work pad and above ground maintenance repairs. This hindered the trending of information about damage caused by flood, erosion and thawing. JPO considered this to be an instance of noncompliance with stipulation 1.18.3.

The February 2002 MOA formally established six months as the time limit to update documents. This MOA and the closure of AAI 1955 (additional details on AAI 1955 provided under stipulation 1.21) resolved the compliance issues with this stipulation.

Stipulation 1.18.4. Any substantive modification or change in access roads and airstrips, including their number and location, shall be adopted through the Notice to Proceed process described in stipulation 1.7 to ensure that the change meets the requirements of this stipulation. In addition, access road construction will be guided by the requirement of stipulation 3.2.3. No access roads or airports have been constructed or modified since 1997 and this stipulation has not been invoked.

STIPULATION 1.19. HOUSING AND QUARTERS

Stipulation 1.19.1. Lessees shall furnish such representatives of the State as may be designated by the Pipeline Coordinator with adequate meals, living quarters and office space, reasonable use of Lessees' communications systems, and reasonable surface and air transportation during the construction, operation, maintenance and Termination of the Pipeline. Whenever possible, Lessees shall be notified in writing by the Pipeline Coordinator in advance regarding the number of Persons for whom such services and facilities will be required.

Scope

This stipulation applies to services and facilities to be furnished to representatives of the State of Alaska designated as such by the State Pipeline Coordinator and apply during all phases of TAPS.

Summary

This stipulation requires the Lessees to furnish adequate meals, living quarters and office space, reasonable use of Lessees communications systems, and reasonable surface and air transportation during all phases of TAPS.

Compliance

There are no compliance issues related to stipulation 1.19. The February, 1999 Operations CMP Report revealed that the Lessees were in general compliance with this stipulation. In addition, the CMP database and other JPO sources, including DNR case-files, were reviewed to determine if any complaints or reports were received to indicate unsatisfactory conditions related to this stipulation (JPO Technical Report, FBU-01-E-002).

STIPULATION 1.20. HEALTH AND SAFETY

Stipulation 1.20.1. Lessees shall take all measures necessary to protect the health and safety of all Persons affected by their activities performed in connection with the construction, operation, maintenance or Termination of the Pipeline, and shall immediately abate any health or safety hazards. Lessees shall immediately notify the Pipeline Coordinator of all serious accidents which occur in connection with such activities.

Scope

This stipulation applies during all phases of TAPS.

Summary

This stipulation requires the Lessees to take all measures necessary to protect the health and safety of persons affected by activities performed by the Lessees in connection with pipeline activities, and requires immediate abatement of any health or safety hazard. The lessee must also notify the State Pipeline Coordinator of all serious accidents related to pipeline activities.

Compliance

The State Pipeline Coordinator's Office staff includes two representatives from the Alaska Department of Labor (ADOL) and one representative from the Alaska Department of Public Safety, State Fire Marshal's Office (DPS/SFO). The State Pipeline Coordinator relies on the expertise of these individuals for issues involving health, safety and fire prevention. In addition to Lease stipulation compliance monitoring, ADOL and DPS/SFO staff also conduct agency inspections to monitor Alyeska compliance with state safety laws. Both ADOL and DPS/SFO provided the State Pipeline Coordinator with 2001 Compliance Reports that find Alyeska in compliance with state law (Attachment 2).

There are also no Lease compliance issues related to stipulation 1.20. JPO Assessment Report ANC-02-A-001 summarizes JPO activities associated with stipulation 1.20. For the period 1997-2001, the JPO CMP database contains reference to five assessments, 15 technical reports and 267 surveillances related to stipulation 1.20. A total of 1,766 attributes were examined. There were 14 findings identified for this stipulation, of which one remains open (Table 1). The JPO also issued four Orders and two Notices addressing stipulation 1.20 requirements. All Orders and Notices have been closed (details provided under stipulation 1.21, Conduct of Operations).

Alyeska is required to protect the health and safety of all persons including employees, contractors, and the public. In order to accomplish this, Alyeska has implemented SA-38, *Corporate Safety Manual* and EC-71x *Emergency Contingency Action Plan* (there is a separate volume for each major facility) as the primary implementing documents. These two documents include the requirements of 29 CFR 1910 *General Occupational Safety and Health Standards* and 29 CFR 1926 *Safety and Health Regulations for Construction* required safety programs. Contractors are also required to have and use documents for the same purpose. Construction and project contracts require individual safety plans that identify potential hazards and controls for those hazards.

A comprehensive review of the Alyeska documents as well as accidents reported to OSHA and the State Fire Marshal's Office for the period January 1, 1997 to June 30, 2001 did not reveal any serious accidents Alyeska failed to report.

STIPULATION 1.21. CONDUCT OF OPERATIONS

Stipulation 1.21.1. Lessees shall perform all Pipeline operations in a safe and workmanlike manner so as to ensure the safety and integrity of the Pipeline, and shall at all times employ and maintain personnel and equipment sufficient for that purpose.

Lessees shall immediately notify the Pipeline Coordinator of any condition, problem, malfunction, or other occurrence which in any way threatens the integrity of the Pipeline.

Scope

This stipulation applies during all phases of TAPS necessary to ensure the safety and integrity of the Pipeline System.

Summary

This stipulation requires the Lessees to adopt the necessary programs and personnel to ensure the safety and integrity of the pipeline, but does not identify any specific programs or methodologies that must be implemented. The stipulation further requires the company to notify the State Pipeline Coordinator of any problem, condition, or malfunction that threatens the integrity of the pipeline.

Compliance

There are no compliance issues related to stipulation 1.21 not addressed to the satisfaction of the State Pipeline Coordinator. For the period 1997-2001, The JPO CMP database contains reference to 11 assessments, 23 technical reports and 131 surveillances related to stipulation 1.21. A total of 746 attributes were examined. There were 31 findings identified for this stipulation, of which one remains open (discussed below under AAI 2076).

JPO compliance monitoring revealed various instances where Alyeska deferred work that the JPO deemed essential to maintaining pipeline integrity, protecting public safety and the environment. To ensure resolution of these issues, the State Pipeline Coordinator and Authorized Officer issued the following orders, notices and directives to Alyeska between August and December of 1999:

1. Slope Stability

On August 11, 1999, the State Pipeline Coordinator ordered Alyeska to provide a repair and maintenance corrective action plan to bring the above ground pipeline support system on Squirrel Creek's north and south slopes into compliance with state lease stipulations 3.5.1 and 3.9.1 (JPO Letter No. 99-063-JH, 8/11/99). Soil movement and melting permafrost affected the position of some vertical support members on the slopes. The State Pipeline Coordinator directed Alyeska to provide a corrective action plan, which could be either a design basis waiver with thorough justification or a project plan for restoring the VSMs to the original design basis. The State Pipeline Coordinator also directed Alyeska to provide a summary of the specific repairs to be included in the corrective action plan.

Alyeska replaced the VSMs on the north side of Squirrel Creek (Alyeska Project F-171). Due to permafrost thaw over the years, the replacement VSMs were driven to a depth of fifty feet for stabilization. VSM repair on the north side now allows the pipe to function as designed. The State Pipeline Coordinator reviewed and approved Alyeska's design basis variance request for Squirrel Creek, which closes the noncompliance with Lease stipulations 3.5.1 and 3.9.1 and the August 11, 1999 order. The State Pipeline

Coordinator approved the design basis variance provided Alyeska implements monitoring, surveillance and maintenance program to protect the aboveground pipe against mass movement. The variance was approved because of Alyeska's corrective action plan, completed risk assessment, project F-171 VSM repairs at Squirrel Creek, repair of field instrumentation, re-evaluation of potential for soil liquefaction and Alyeska's commitment to continued surveillance, monitoring, and maintenance of the aboveground system and slope stability. Approval of the design basis variance closed JPO Finding 98-A-011-F/01. The order was closed via JPO Letter No. 00-012-WT, January 4, 2001.

2. Pungs Crossing Bridge

On October 4, 1999, the State Pipeline Coordinator ordered Alyeska to replace the bridge at PLMP 289.5, Pungs Crossing (JPO Letter No. 99-026-LB, October 4, 1999). The order was necessary to provide safe access to the right-of-way and the pipeline for oil spill response (Stipulations 2.5.1.1, 2.8.1, 3.9.1, lease section 22). The Pungs Crossing Bridge was declared unusable in 1998 and became a block point on the right-of-way for oil spill response. The State Pipeline Coordinator was concerned that the inability to use this bridge could impact a timely response to an oil spill. The approved *Pipeline Oil Discharge Prevention and Contingency Plan* requires that Alyeska be able to efficiently reconnoiter the pipeline and have reasonable access for response actions. The continued existence of this block point would have impacted a timely response to a spill in the area. Rather than allow the bridge to remain a block point, the State Pipeline Coordinator directed Alyeska to complete repairs by October 31, 1999. Alyeska replaced the Pungs Crossing Bridge and JPO Surveillance Report JPO-00-S-051 verified all requirements of the order were satisfied. The order was closed via JPO Letter No. 00-073-JH, October 24, 2000.

3. Grey Stream Fish Passage

On October 29, 1999, the State Pipeline Coordinator directed Alyeska to implement corrective action at Grey Stream (PLMP 790.9). Alyeska was ordered to: 1) develop a draft conceptual design for State Pipeline Coordinator review, 2) finalize the design and submit permit applications, including an NTP application and an "Issued for Construction" package to appropriate agencies, 3) complete all construction, including necessary re-vegetation between May 15 and July 15, 2000, and 4) continue to monitor the stability and effectiveness of a new channel and other remedial efforts in accordance with a Project Monitoring Plan (JPO Letter No. 99-029-LB, October 29, 1999). Alyeska completed the corrective action and the order was closed via JPO Letter No. 00-059-MC, July 26, 2000.

4. Cold Restart Procedure

On November 5, 1999, the State Pipeline Coordinator directed Alyeska to provide a final schedule for development and implementation of the cold restart procedure for TAPS. Specifically, completion of laboratory testing, development of the cold restart procedure, final hydraulic model updates and revision of the TAPS operating procedure manuals and design basis documents (JPO Letter No. 99-083-JH, November 11, 1999). The State Pipeline Coordinator directed Alyeska to provide a cold restart procedure in the unlikely

event TAPS would have to shut down for a prolonged period of time during the winter. On 12/1/99, Alyeska submitted a schedule to JPO for the development and implementation of the cold restart procedure for TAPS to be completed early in 2000. JPO concurred with the schedule. In June of 2000, Alyeska informed JPO the schedule would be delayed until November 30, 2000 because of complications in development and implementation. JPO approved the extension due to the difficulties Alyeska had developing a method for cold restart, specifically with the gelling of crude oil at cold temperatures. JPO review of the cold restart plan and procedures led to four additional questions that JPO and Alyeska are resolving (Alyeska Letter No. 02-18296, March 6, 2002 and JPO Letter 02-012-JS, March 14, 2002). The order was closed by JPO Letter No. 02-0130JS. As of April 2002, the cold restart issue is primarily related to continuity of oil supply and not safe pipeline operations. Accordingly, future JPO inquiries may not cite this stipulation.

5. Audit Action Item Status

In 1993, the TAPS Owner companies promised the U.S. Congress that they would correct audit action items (AAI) and prevent their recurrence. Congress tasked the U.S. Department of the Interior through the JPO to verify the AAI's were successfully closed. This task was accomplished using a process in which JPO reviews and approves Alyeska's corrective action plans for the most critical AAI's and verifies implementation. JPO issued a notice to Alyeska to resolve some of the long-standing issues that were originally identified as audit action items (AAI) from the TAPS audits. Several audit items had slipped beyond scheduled closure deadlines. JPO specified resolution of five remaining audit items.

On October 25, 1999, JPO provided a notice (JPO Letter No. 99-030-LB) to Alyeska regarding closure of the five audit action items remaining from the 1993 audit of TAPS:

- AAI 1955 – Configuration management – Closed. JPO and Alyeska completed an audit on January 14, 2002 and found the audit results to be satisfactory. Alyeska Letter No. 02-18238, February 19, 2002 stated that Alyeska has met the commitment to create and use change management processes required to close AAI 1955 and requested closure concurrence from the Joint Pipeline Office. JPO and Alyeska entered into a Memorandum of Agreement (MOA) on February 28, 2002 that addressed the closure of AAI 1955 (Appendix F). The State of Alaska closed AAI 1955 pursuant to direction from the State Attorney General's Office.
- AAI 2076 – Operation of RGV control system in Triconix mode – currently remains open. This project cannot be completed until a communication link with sufficient bandwidth is established between the pump stations and the remote gate valves along the pipeline. Availability of the bandwidth is dependent on efforts to complete digitization of the current microwave system or the availability of a fiber optics system that meets the necessary communication reliability criteria. At this time, Alyeska is moving toward using the fiber optics line to provide the bandwidth necessary for the master terminal units required to close this audit action item. JPO will close this order when Alyeska commits to a firm schedule for installation and operation of the master terminal units. This schedule is dependent upon Alyeska securing the bandwidth,

whether by fiber optics or digital microwave. This issue is discussed in more detail under stipulation 1.18.2. JPO will continue to track this audit action item.

- AAI 2113 – Completion of a qualification development program - closed by JPO Letter No. 00-021-JH, April 4, 2000.
- AAI 50528 – Access road and work pad bridge design compliance - closed per JPO memorandum, dated December 21, 2000. JPO checked 14 bridges to verify they met Alyeska operational requirements per Alyeska Master Specification S-503 “Guide for Design, Inspection and Modification of Access Roads and Workpad Bridges” and Alyeska Master Specification S-510 “Seismic Design Criteria for Structures”. Bridge load limit signs were installed.
- AAI 50552 – Install secondary containment for Pump Station 1 crude oil tanks, No. 110 and No. 111 - closed by JPO Letter No. 00-012-JH, March 17, 2000.

6. Non-Plenum Cables at OCC

On October 15, 1999, the JPO ordered Alyeska to replace all non-plenum rated (ventilation air duct) cables located in the Operations Control Center at the Valdez Marine Terminal by February 28, 2000 (JPO Letter No. 99-086-JS, October 15, 1999). The order was issued to ensure Alyeska compliance with National Fire Protection Association standards and the National Electric Code. Alyeska developed plans and funding for the work since 1994, but postponed it. After project start-up, Alyeska expanded the scope of work to include identification of additional cables that required replacement, identification and marking of all cables for future reference, and updating all drawings. JPO approved Alyeska’s request for an extension to complete work by May 1, 2000. JPO verified that all work required by the order was finished, and closed the order with JPO Letter No. 00-036-JH, June 12, 2000.

7. Compulsory Redesign of the Tanker Vapor Control System at the Valdez Marine Terminal

JPO issued two notices to Alyeska concerning the VMT Tanker Vapor Control System. The first notice was issued October 25, 1999 (JPO Letter No. 99-033-LB). The order stated that to ensure continued safe and environmentally sound operation of the tanker vapor control system, Alyeska must complete all the compulsory redesign recommendations identified in Alyeska’s Reliability Centered Maintenance (RCM) analysis for Berths 4 and 5 at the Valdez Marine Terminal. Alyeska was required to submit their plan and schedule for redesign completion for Berths 4 and 5 to JPO for review and approval no later than February 4, 2000.

In June 2000, JPO requested an update on Alyeska’s progress on updating the maintenance strategy for the tanker vapor control system, specifically records management, training and development, regulatory compliance tools, project management, document and drawing control, change management, procurement and maintenance. Alyeska completed most of the action tracking items identified by the Reliability Centered Maintenance analysis of the Valdez Marine Terminal Vapor Control System. The items not yet completed are near completion or have been included in a Valdez Marine Terminal project package. JPO Engineering Report VMT-02-E-001 documented the progress that APSC has made to meet the requirements of this order. As

part of the 2002 work plan, JPO will conduct a final close-out inspection to document completion of the unfinished items. The JPO closed this notice with JPO Letter No. 02-004-DG, February 11, 2002.

8. Tanker Vapor Control System (TVCS) Management Review

On November 23, 1999, the JPO issued a notice that directed Alyeska to provide a detailed plan and schedule to conclude the management review of the Valdez Marine Terminal tanker vapor control system (JPO Letter No. 99-087-JH, November 23, 1999). The plan was also to include the requirements listed in JPO's report on the Valdez Marine Terminal TVCS Management Review of November 22, 1999. On February 4, 2000, Alyeska provided a plan for implementation of the TVCS Management Review recommendations. The information provided satisfied the JPO requirement for a description and schedule for completion of the RCM non-compulsory recommendations. This notice was closed via JPO Letter No. 01-002-JS, January 26, 2001.

9. Test the Valdez Marine Terminal Fire Suppression System – 3 Orders Issued

First Order: On October 14, 1999, JPO ordered Alyeska to demonstrate the subsurface fire foam system was operational and effective (JPO Letter No. 99-085-JS). To ensure the functionality of the crude oil storage tank subsurface foam systems at the Valdez Marine Terminal, JPO required Alyeska to conduct a functional test of all subsurface foam systems by December 31, 1999.

Second Order: On November 8, 1999, the JPO issued a second order pertaining to the VMT Fire Suppression System, asking for more specific information (JPO Letter No. 99-090-JS). Alyeska was required to: 1) submit a plan for ensuring crude oil storage tank subsurface foam systems were operable, 2) specify which subsurface fire systems were operational, 3) determine which tanks had blockages in their fire foam distribution systems, and 4) determine what fire prevention and response measures were in place as a result of the blockages

Third Order: On December 2, 1999, the JPO issued Alyeska a third order to clean and inspect crude oil storage tanks and develop contingency measures at the Valdez Marine Terminal (Letter No. 99-095-JS). This order amended, restored, and expanded the first order of December 31, 1999 (JPO Letter No. 99-085-JS, October 14, 1999).

Alyeska completed a schedule for the testing of tanks, including installation of cross over piping, spider pipe testing, fluidization and cleaning the tanks. All requirements for the three orders were satisfied and the JPO closed the orders via JPO Letter 01-003-JS, March 19, 2001.

10. Plan For Crude Oil Loading

On October 26, 2000, JPO directed Alyeska to provide items 1, 2, and 3 (below) by November 13, 2000 and Item 4 (below) by December 15, 2000 (JPO Letter no. 00-069-JS):

1) A management and contingency plan for movement of oil until Berth 4 can be restored to full operation, including number of available operational tanks, tank capacity, producer limits on throughput, tanker availability and tanker transit speed management, weather

watch, remaining uncontrolled loading air increment and any other approach used to avoid problems caused by weather-delayed loading and high tank inventory.

2) Plans and schedules regarding expeditious repair of Berth 4 control valves and Berth 3 ballast water treatment piping.

3) Causal factor analyses concerning the Berth 4 arcing incident and the design review process failure involved in replacing the 24-inch berth valve with a 16-inch control valve.

4) An explanation of Alyeska's future berth operation, maintenance and repair plan, including whether a tanker vapor recovery system will be installed at Berth 3. If not, provide a justification to explain why.

Alyeska provided JPO with an acceptable oil loading and movement plan that adequately addressed all the relevant factors, which could inhibit the smooth transport of oil out of Valdez. This directive was close.

11. Resulting Directive from JPO Investigation of VMT Fatality of August 16, 2000

On August 16, 2000, a truck accident at the Valdez Marine Terminal resulted in a fatality of the driver. JPO investigation of the accident resulted in two findings, a noncompliance with Stipulation 1.20, Health and Safety, and a noncompliance with Stipulation 1.18.1, Surveillance and Maintenance. As a result, on November 27, 2000, the JPO directed Alyeska to implement the items listed below immediately (JPO Letter No. 00-074-JS, November 27, 2000). Alyeska was directed to establish and implement a standardized means of controlling heavy equipment parked on the ready line at the Valdez Marine Terminal and all other locations. The JPO required a procedure that would:

1. Prevent the checkout and use of heavy equipment waiting for repair.
2. Prevent unqualified drivers/operators from using the equipment.
3. Document all drivers/operators of heavy equipment.

JPO reviewed the management action plan submitted by Alyeska (December 2000) and conducted inspections for verification and closure. The JPO closed this directive on December 28, 2001 (JPO Letter No. 01-191-DG).

STIPULATION 1.22. APPLICABILITY OF STIPULATIONS

Stipulation 1.22.1. Nothing in these Stipulations shall be construed as applying to activities of Lessees that have no relation to the Pipeline.

Stipulation 1.22.2. Nothing in these Stipulations shall be construed to affect any right or cause of action that otherwise would be available to Lessees against any person other than the State.

Scope

This stipulation applies during all phases of TAPS.

Compliance

There are no compliance issues associated with stipulation 1.22. JPO Assessment ANC-

02-A-007 summarizes JPO activities related to this requirement. Stipulation 1.22 is a legal and administrative provision of the lease that does not require active, continuous compliance monitoring or verification.

2. ENVIRONMENTAL

STIPULATION 2.1. ENVIRONMENTAL BRIEFING

Stipulation 2.1.1. Prior to, and during, construction of the Pipeline, Lessees shall provide for environmental and other pertinent briefings for construction and other personnel by such State employees as may be designated by the Pipeline Coordinator. Lessees shall arrange the time, place and attendance for such briefings upon request by the Pipeline Coordinator.

Scope

This stipulation applies to all construction activity during all phases of TAPS and provides the State Pipeline Coordinator with the discretion to require briefings on environmental matters relevant to construction.

Summary

This stipulation requires the Lessees to accommodate environmental briefings provided by state employees designated by the State Pipeline Coordinator. In addition, the Lessees are required to make all arrangements for such briefings, bear all costs other than that for state employees and ensure attendance of personnel requested by the State Pipeline Coordinator. For the purpose of administering this stipulation, "construction" as used in the stipulation, includes re-routing of the pipeline and other construction-like activity authorized under a Notice to Proceed, Land Use Permit, or Temporary Use Permit.

Compliance

There are no compliance issues related to stipulation 2.1. JPO Assessment Report FBU-01-A-002 indicated that the State Pipeline Coordinator has not requested the Lessees to provide for environmental or other pertinent briefings.

STIPULATION 2.2. POLLUTION CONTROL

Stipulation 2.2.1. General

Stipulation 2.2.1.1. Lessees shall conduct all activities associated with the Pipeline in a manner that will avoid or minimize degradation of air, land and water quality. In the construction, operation, maintenance and Termination of the Pipeline, Lessees shall perform their activities in accordance with applicable air and water quality standards, Related Facility siting standards, and related plans of implementation.

Stipulation 2.2.2. Water and Land Pollution

Stipulation 2.2.2.1. Lessees shall comply with applicable "Water Quality Standards" of the State of Alaska as approved by the Environmental Protection Agency.

Stipulation 2.2.2.2. Mobile ground equipment shall not be operated in or on lakes, streams or rivers on State Land unless such operation is approved in writing by the Pipeline Coordinator.

Stipulation 2.2.3. Thermal Pollution

Stipulation 2.2.3.1. Lessees shall comply with the standards set for thermal pollution in the State of Alaska "Water Quality Standards," as approved by the Environmental Protection Agency.

Stipulation 2.2.4. Air Pollution and Ice Fog

Stipulation 2.2.4.1. Lessees shall utilize and operate all facilities and devices used in connection with the Pipeline so as to avoid or minimize air pollution and ice fog. Facilities and Devices which cannot be prevented from producing ice fog shall be located so as not to interfere with airfields, communities or roads.

Stipulation 2.2.4.2. Emissions from equipment, installations and burning materials shall meet applicable State air quality standards.

Stipulation 2.2.5. Pesticides, Herbicides and other Chemicals

Stipulation 2.2.5.1. Lessees shall use only non-persistent and immobile types of pesticides, herbicides and other chemicals. Each chemical to be used and its application constraint shall be approved in writing by the Pipeline Coordinator prior to use.

Stipulation 2.2.6. Sanitation and Waste Disposal

Stipulation 2.2.6.1. "Waste" means all discarded matter, including but not limited to human waste, trash, garbage, refuse, oil drums, petroleum products, ashes and equipment.

Stipulation 2.2.6.2. All waste generated in construction, operation, maintenance and Termination of the Pipeline shall be removed or otherwise disposed of in a manner acceptable to the Pipeline Coordinator. All applicable standards and guidelines of the Alaska State Department of Environmental Conservation, and other State agencies shall be adhered to by Lessees. All incinerators shall meet the requirements of applicable State laws and regulations and shall be used with maximum precautions to prevent forest and tundra fires. After incineration, material not consumed in the incinerator shall be disposed of in a manner approved in writing by the Pipeline Coordinator. Portable or permanent waste disposal systems to be used shall be approved in writing by the Pipeline Coordinator.

Scope

This stipulation applies during all phases of TAPS including the use of pesticides, herbicides and other chemicals applied as part of TAPS.

Summary

This section requires the Lessees to construct and operate the pipeline system in a manner that avoids or minimizes degradation of air, land, and water quality. It requires the Lessees to comply with all applicable state and federal environmental and pollution control statutes and regulations. The stipulation has subsections that specifically address: water and land pollution; thermal pollution; air pollution and ice fog; pesticides, herbicides and other chemicals; and sanitation and waste disposal.

Compliance

The State Pipeline Coordinator's Office staff includes a Liaison from ADEC. The State Pipeline Coordinator relies on the Liaison for coordination with the appropriate ADEC divisional staff on issues involving pollution control. The Environmental Protection Agency also has a staff position assigned to the JPO that serves the same interagency coordination role. In addition, the ADF&G Liaison also monitors pollutants with respect to fish streams. All three agencies provided the State Pipeline Coordinator or Authorized Officer with 2001 Compliance Reports that find Alyeska in compliance with relevant state and federal law (Attachment 2).

There are also no Lease compliance issues related to stipulation 2.2. JPO Assessment Report ANC-02-A-003 summarizes JPO activities associated with stipulation 2.2. The JPO CMP database references 106 oversight reports (93 surveillances, 6 assessments, and 7 technical engineering reports) related to stipulation 2.2. A total of 328 attributes were examined. There were five compliance findings associated with this stipulation, all of which have been closed.

Alyeska has developed the Environmental Protection Manual (EN-43) to ensure compliance with this stipulation. The manual is comprised of two volumes (Environmental Protection, Volume 1 and Waste Management, Volume 2) that outline the guidelines for environmental protection and pollution control compliance activities on TAPS.

The 1999-2000 CMP Report identified two JPO Notices related to stipulation 2.2. The first directed Alyeska to complete all compulsory redesign conclusions and recommendations identified in the Reliability-Centered Maintenance reports for Berths 4 and 5 at the Valdez Marine Terminal, and to submit its plan and schedule for redesign completion for Berths 4 and 5 to JPO for review and approval. The second directed Alyeska to provide a detailed plan and schedule to conclude the management review of the non-compulsory items in the VMT Tanker Vapor Control System (TVCS), to include the requirements listed in JPO's report on the VMT TVCS Management Review, October 7, 1999. Both notices have since been closed.

STIPULATION 2.3. BUFFER STRIPS

Stipulation 2.3.1. Public Interest Areas

Stipulation 2.3.1.1. No construction activity in connection with the Pipeline shall be conducted within one-half (½) mile of any officially designated State or municipal park, wildlife refuge, research natural area, recreation area, or recreation site unless such activity is approved in writing by the Pipeline Coordinator.

Stipulation 2.3.2. Vegetative Screen

Stipulation 2.3.2.1. Lessees shall not cut or remove any vegetative cover within a minimum five hundred (500) foot strip between State highways and material sites unless such cutting or removal is approved in writing by the Pipeline Coordinator.

Stipulation 2.3.2.2. Where the Right-of-Way crosses State highways, a screen of vegetation native to the specific setting shall be established over disturbed areas unless otherwise approved in writing by the Pipeline Coordinator.

Stipulation 2.3.3. Streams

Stipulation 2.3.3.1. The Pipeline shall be located so as to provide three hundred (300) foot minimum buffer strips of undisturbed land along streams on State Land unless otherwise approved in writing by the Pipeline Coordinator.

Scope

The stipulation applies during all phases of TAPS including construction activities within ½ mile of mile of any officially designated State or municipal park, wildlife refuge, research natural area, recreation area, or recreation site and; removal of vegetation within a minimum five hundred (500) foot strip between State highways and material sites; and construction activities within 300 feet of streams.

Summary

Stipulation 2.3.1 applies to construction activity and establishes a one-half (1/2) mile Buffer Strips around Public Interest Areas. Stipulation 2.3.2 requires five hundred (500) foot Vegetative Screens between Highways and Material Sites and vegetative screens at Pipeline /Highway Crossings. Stipulation 2.3.3 requires three hundred (300) foot buffer strips of undisturbed land along streams. Stipulation 2.3 also provides for increases and decreases in the size of buffer strips if written authorization is obtained from the State Pipeline Coordinator. Activities that occur within a buffer strip or alter the size of vegetation screens and buffers require written approval by the State Pipeline Coordinator.

Compliance

There are no compliance issues related to stipulations 2.3. JPO Assessment Report FBU-01-A-003, Revision 1 summarizes JPO activities associated with stipulation 2.3. For the period 1997-2001, The JPO CMP database contains reference to one assessment and 17

surveillances related to stipulation 2.3. A total of 22 attributes were examined. There were no findings associated with this stipulation.

Photographs and site visits were documented in 11 surveillance reports and summarized in JPO Assessment Report FBU-01-A-003, Revision 1. Public interest areas, material sites, pipeline crossings of state highways, and the spatial relationship of the right of way to streams and water bodies are identified on Alyeska G-100 maps and the Environmental Atlas of the Trans-Alaska Pipeline. A review of the past three years of Alyeska's planned projects lists and end of year summary reports indicates that construction activities have occurred in areas addressed by Stipulation 2.3. In each instance when activity occurred, written authorization was requested and given by the AO/SPC. JPO records also indicated that Stipulation 2.3 was referenced three times in previous surveillance documents during the three-year review period. There were no unsatisfactory findings referring to this stipulation.

The provisions found within Stipulation 2.3 were most applicable during the initial design and construction phase of the pipeline. It was during this period that the mode and location of the pipeline and related facilities with respect to established buffer strips at public interest areas (parks, monuments, historic sites, etc.), material sites, roadways, and water bodies could easily have been influenced and adjusted. The pipeline alignment has been modified twice since initial installation. In both instances, written authorization was issued by the State Pipeline Coordinator through the NTP process.

When construction activity occurs within buffer strips, the activity is either a planned maintenance project or an emergency repair project. Authorization to conduct the activity is normally obtained through the permitting process. After the appropriate permits are obtained, the State Pipeline Coordinator authorizes the construction activity with an NTP. Review of the permit application generate site-specific concerns that are address through individual permits or as a condition of the NTP

The JPO (Letter No. 01-012-CA, January 19, 2001) issued the Revised JPO Brushing Policy to prevent, protect, or minimize damage to fish, wildlife, aesthetics, water quality, erosion control, and vegetation resources. Lessees were directed to maintain buffer strips of undisturbed vegetation adjacent to fish bearing streams and other waterbodies along TAPS. These buffers are in addition to those imposed by stipulation 2.3.3.1. The entire JPO Brushing Policy is included in stipulation 2.4.

STIPULATION 2.4. EROSION CONTROL

Stipulation 2.4.1. General

Stipulation 2.4.1.1. Lessees shall perform all Pipeline construction, operation, maintenance and Termination activities on State Land so as to avoid or minimize disturbance to vegetation.

Stipulation 2.4.1.2. The design of the Pipeline shall provide for the construction of control facilities that will avoid or minimize erosion.

Stipulation 2.4.1.3. The erosion control facilities shall be constructed to avoid induced and accelerated erosion and to lessen the possibility of forming new drainage channels resulting from Pipeline activities. The facilities shall be designed and operations conducted in such a way as to avoid or minimize disturbance to the thermal regime.

Stipulation 2.4.2. Stabilization

Stipulation 2.4.2.1. Surface materials taken from disturbed areas shall be stockpiled and utilized during restoration unless otherwise approved in writing by the Pipeline Coordinator. Stabilization practices, as determined by the needs for specific sites, shall include but shall not be limited to seeding, planting, mulching, and the placement of mat binders, soil binders, rock or gravel blankets or structures.

Stipulation 2.4.2.2. All disturbed areas on State Land shall be left in a stabilized condition satisfactory to the Pipeline Coordinator. Such satisfaction shall be stated in writing by the Pipeline Coordinator.

Stipulation 2.4.3. Crossing of Streams, Rivers or Flood Plains

Stipulation 2.4.3.1. Lessees shall prevent or minimize erosion at stream and river crossings and those parts of the Pipeline within flood plains as defined in Stipulation 3.6.

Stipulation 2.4.3.2. Temporary access over stream banks shall be made through use of fill ramps rather than by cutting through stream banks, unless otherwise approved in writing by the Pipeline Coordinator. Lessees shall remove such ramps upon termination of seasonal or final use. Ramp materials shall be disposed of in a manner approved in writing by the Pipeline Coordinator.

Stipulation 2.4.4. Seeding and Planting

Stipulation 2.4.4.1. Seeding and planting of disturbed areas on State Land shall be conducted as soon as practicable and, if necessary, shall be repeated until vegetation is successful, unless otherwise approved in writing by the Pipeline Coordinator. All other restoration shall be completed as soon as possible.

Stipulation 2.4.5. Excavated Material

Stipulation 2.4.5.1. Excavated material in excess of that required to backfill around any structure, including the pipe, shall be disposed of in a manner approved in writing by the Pipeline Coordinator.

NOTE: The Following Special Provisions were provided to Alyeska in January 2001:

JPO BRUSHING POLICY

January 2001

To prevent, protect or minimize damage to fish, wildlife, aesthetics, water quality, erosion control, and vegetation resources on state and federal lands along the Trans-Alaska Pipeline System (TAPS), Lessees are directed to maintain buffer zones of vegetation pursuant to the following stipulations:

- *2.2.2.2 – Water and Land Pollution, Mobile Ground Equipment Use*
- *2.4.1.1 – Erosion Control, Disturbance to Vegetation*
- *2.4.3.1 – Erosion Control, Erosion at Stream and River Crossings*
- *2.4.3.2 – Erosion Control, Temporary Access Over Stream Banks*
- *2.5 – Fish and Wildlife Protection*
- *2.7.2.3 – Clearing, Felling Away from Watercourses*
- *2.7.2.4 – Clearing, Hand Clearing*
- *2.7.4.5 – Clearing, Prevent Delays to Fish Passage and Erosion*
- *2.8.1 – Disturbance of Natural Water*
- *2.10.1 – Aesthetics, Consideration of Aesthetic Values*

Specific Requirements

1. Within the TAPS right-of-way brushing of above and below ground pipe is allowed from the driveline to a distance of six (6) feet beyond pipe centerline and within a ten (10) foot radius around each VSM except that: a) within the TAPS right-of-way north of pipeline milepost (PLMP) 175 at stream crossings no vegetation shall be cut or otherwise disturbed within a fifty (50) foot buffer zone of any water body without prior approval of the State Pipeline Coordinator or Authorized Officer and; b) within the TAPS right-of-way south of PLMP 175 at stream crossings no vegetation shall be cut or otherwise disturbed within a twenty (20) foot buffer zone of any water body without prior approval of the State Pipeline Coordinator or Authorized Officer.

2. No debris resulting from clearing or brushing operations may be left in water bodies (including periods when the water body is dry).

Exceptions

1. Within the prescribed buffers zones, vegetation may be cut with hand tools (including chainsaws, bushwhackers, and hedge trimmers) when necessary to conduct maintenance or complete a project as follows:

- *within a ten (10) foot radius around each VSM and cross beam;*
- *a twelve (12) foot wide access path from the non-stream side edge of the buffer strip to VSMs;*
- *around a culvert inlet and outlet for a distance of up to ten (10) feet from any point on the culvert and as necessary to provide pedestrian access;*

- *around survey monuments, test stations, monitoring rods, signs, and other appurtenances to the extent necessary for pedestrian access and to perform necessary operations;*
 - *to a maximum fifteen (15) foot wide workpad driveline at approved stream crossings but not beyond block points and;*
 - *around check valves and remote gate valves as necessary for protection from wildfire.*
2. *Within the prescribed buffer strips, vegetation may be cut with mechanized equipment as follows:*
- *along access roads from toe to toe of the driveline and;*
 - *on the top of spur dikes to accomplish maintenance and survey needs.*
3. *Projects and other maintenance activities outside of the water body buffer zone that require disturbance of vegetation are allowed without prior approval. However, the disturbance must be kept to only that necessary to conduct the activity.*

Brushing activities not covered under this policy require the written approval of the Authorized Officer or State Pipeline Coordinator.

Definitions/Notes

1. *Disturbance to vegetation means damage to the root mass.*
2. *For the purpose of buffer zone boundaries, the term water body for fish streams means the ordinary high-water mark, which is not dependent on the presence of water. For water bodies other than fish streams, the presence of water determines the measurement boundary for the buffer zone, if no water is present there is no required buffer zone.*
3. *For the purpose of compliance, specified distances are considered approximate with the specific intent to minimize disturbance to vegetation along the entire right-of-way.*

Scope

These stipulations apply to all disturbed lands attributable to the Pipeline during all phases of TAPS. This stipulation also applies to all stream or river crossings and all parts of the Pipeline System within flood plains, temporary access across streams and to all material excavated for TAPS.

Summary

This stipulation requires the Lessees to design and operate all pipeline systems in such a manner as to minimize erosion and control sedimentation transportation and deposition. Additionally, the stipulation specifically addresses stream and river crossings, and flood plains, and requires the Lessees to minimize erosion and control sedimentation in these areas. It also requires the Lessees to stockpile surface materials taken from disturbed areas and use it for restoration, utilize stabilization practices, including, but not limited to, those techniques mentioned in stipulation 2.4.2.1 that are appropriate to the specific disturbed site; and leave all disturbed areas in a stabilized condition satisfaction to the State Pipeline Coordinator.

Compliance

There are no compliance issues related to stipulations 2.4. JPO Assessment Report ANC-02-A-002 summarizes JPO activities associated with stipulation 2.2. The JPO CMP database references 53 oversight reports (48 surveillances, 3 assessments, and 2 technical engineering reports) related to stipulation 2.4. A total of 329 attributes were examined. There were three compliance findings associated with this stipulation, all of which have been closed.

Alyeska developed the Environmental Protection Manual (EN-43), the Erosion Control Plan for Maintenance Operations (EP-106), and the Surveillance Manual (MS-31) that incorporate specific requirements to ensure compliance with stipulation 2.4.

Finding JPO-99-S-066-F/01 identified under stipulation 2.4 was associated with both erosion of a dike and timeliness of corrective maintenance (JPO-99-S-066). Alyeska conducted an audit of the corrective action process in March 2000 (Alyeska Document SR #00-03). The audit highlights a finding concerning the absence of a management process for documenting decisions regarding System Integrity technical recommendations such as those found in the Alyeska's annual River and Flood Plain Monitoring Summary. These concerns are being addressed (and tracked) under stipulation 1.18.1. The eroded dike was repaired and Finding JPO-99-S-066-F/01 was closed with respect to stipulation 2.4.

STIPULATION 2.5. FISH AND WILDLIFE PROTECTION

Stipulation 2.5.1. Passage of Fish

Stipulation 2.5.1.1. Lessees shall provide for uninterrupted movement and safe passage of fish. Any artificial structure or any stream channel change that would cause a blockage to fish shall be provided with a fish passage structure or facility that meets all Federal and State requirements. The proposed design shall be submitted to the Pipeline Coordinator in accordance with Stipulation 1.7.

Stipulation 2.5.1.2. Pump intakes shall be screened to prevent harm to fish.

Stipulation 2.5.1.3. Abandoned water diversion structures shall be plugged and stabilized to prevent trapping or stranding of fish.

Stipulation 2.5.1.4. If material sites are approved adjacent to or in certain lakes, rivers, or streams, the Pipeline Coordinator may require Lessees to construct levees, beams or other suitable means to protect fish and fish passage and to prevent siltation of streams or lakes.

Stipulation 2.5.2. Fish Spawning Beds and Fish Rearing Areas

Stipulation 2.5.2.1. Fish spawning beds and fish bearing Areas" respectively mean the areas where anadromous and resident fish deposit their eggs and areas required for maintenance and growth of juvenile fish.

Stipulation 2.5.2.2. Lessees shall avoid channel changes in Fish Spawning Beds and Fish Rearing Areas designated by the Pipeline Coordinator; however, where channel changes can not be avoided in such beds or areas, new channels shall be constructed according to written standards supplied by the Pipeline Coordinator.

Stipulation 2.5.2.3. Fish Spawning Beds and Fish Rearing Areas shall be protected from sediment where soil material is expected to be suspended in water as a result of construction activities. Settling basins shall be constructed to intercept silt before it reaches streams or lakes.

Stipulation 2.5.2.4. Lessees shall comply with any special requirements made by the Pipeline Coordinator for a stream system in order to protect Fish Spawning Beds and Fish Rearing Areas. Lessees shall repair all damage to Fish Spawning Beds and Fish Rearing Areas caused by construction, operation, maintenance or Termination of the Pipeline.

Stipulation 2.5.3. Zones of Restricted Activities

Stipulation 2.5.3.1. Lessees' activities in connection with the Pipeline in key fish and wildlife areas on State Land may be restricted by the Pipeline Coordinator during periods of fish and wildlife breeding, nesting, spawning, lambing or calving activity and during major migrations of fish and wildlife. The Pipeline Coordinator shall give Lessees written notice of such restrictive action. From time to time, the Pipeline Coordinator shall furnish Lessees a list of areas where such actions may be required, together with anticipated dates of restriction.

Stipulation 2.5.4. Big Game Movements

Stipulation 2.5.4.1. Lessees shall construct and maintain the Pipeline, both buried and above ground sections, so as to assure free passage and movement of big game animals.

Scope

This stipulation applies to TAPS and related facilities, including access roads, during all phases of TAPS. It applies to structures (culverts, low water crossings, spur dikes, bridges, revetments, material sites and diversion channels) installed in streams and any

stream condition attributable to TAPS, which could affect fish passage. This stipulation also applies to TAPS-built abandoned water diversion structures in or adjacent to streams frequented by fish, material site construction and to all TAPS-related construction activities during all phases of TAPS.

Summary

This section requires the Lessees to design and operate all pipeline systems to protect the movements of fish and wildlife. The stipulation expressly requires the Lessees to assure free passage and movement of fish, and to avoid disturbance of fish spawning beds and rearing areas. The Lessees must also design and construct pipeline sections to assure free passage of big game animals. The State Pipeline Coordinator may also establish specific zones of restricted activities.

Compliance

The State Pipeline Coordinator's Office staff includes a Liaison from ADF&G. The State Pipeline Coordinator relies on the Liaison for technical expertise and coordination with the appropriate ADF&G divisional staff on issues affecting fish and wildlife and their habitat. In addition, the ADF&G Liaison also monitors pollutants with respect to fish streams. ADF&G provided the State Pipeline Coordinator with 2001 Compliance Report that finds Alyeska in compliance with relevant state laws (Attachment 2).

There are also no Lease compliance issues related to stipulations 2.5. JPO Assessment Report ANC-01-A-011 summarizes JPO activities associated with stipulation 2.5. The JPO CMP database references 44 oversight reports (39 surveillances, 3 assessments, and 2 technical engineering reports) related to stipulation 2.5. A total of 183 attributes were examined. There was one compliance finding associated with this stipulation, which has been closed.

Fish spawning beds and fish rearing areas are specified as sensitive areas because they are critical to the continued propagation of fish. Critical life stages for fish include overwintering, spawning, rearing or incubation. The ADF&G permit conditions and requirements, pursuant to AS 16.05.870 and AS 16.05.840 and the applicable lease stipulations are designed to protect fish during their critical life stages such as overwintering, spawning, rearing or incubation.

To maintain viable and healthy fish populations and to comply with state law and lease stipulations, fish in all life stages must be able to freely and efficiently migrate up and down waterways. Fish migrations in these water bodies involve completing one or more cycles of upstream and downstream movements. Evaluation of low water crossings and culverts for compliance with ADF&G permit conditions and requirements provide an indication of compliance with related lease stipulations.

The State Pipeline Coordinator generally will adopt a design accepted by the Commissioner of the Department of Fish and Game (per AS 16.05.840) as the biologically preferred design for any fish passage structure or facility.

Any diversion, obstruction, or change of the natural flow or bed of a waterbody important for anadromous fish requires the approval of the ADF&G under AS 16.05.870. AS 16.05.840 authorizes the Commissioner of the ADF&G to require construction of an efficient fishway, as necessary, in cases in which a dam or other obstruction is built across a stream frequented by salmon or other fish. A violation of either of these provisions is a misdemeanor.

Zones of Restricted Activity created and implemented under stipulation 2.5.3.1, restrict activities at all fish stream crossings of the pipeline and its facilities. Zones of Restricted Activity are designed to protect fish and wildlife breeding, nesting, spawning, and migration periods.

Federal and State restrictions currently include the following:

1. Trans-Alaska Pipeline System Protective Restrictions for Peregrine Falcons and Other Raptors (Issued as a Notice of the Authorized Officer Letter No. 95-073-GD dated May 18, 1995)
2. Zones of Restricted Activity of Key Fish Areas Along TAPS on Federally Administered Lands (Issued as an updated Notice of the Authorized Officer letter no. S.N.-P001-TAPS-3789 dated February 19, 1987).

Upon application by the Lessee, the State Pipeline Coordinator may issue exceptions to these notices. The State Pipeline Coordinator consults with the U.S. Fish & Wildlife Service, the Alaska Department of Fish & Game, or other appropriate agency prior to issuing exceptions.

A continuing variance exists to the Trans-Alaska Pipeline System Protective Restrictions for Peregrine Falcons and Other Raptors to allow airborne and ground surveillance and use of the alternate Pump Station 6 helicopter approach.

Big game movements occur along the length of TAPS. In response to big game movements, the pipeline has been designed with features (e.g. height constraints on elevated sections, buried animal crossings, and raised-pipe animal crossings) to provide opportunities for free passage and movement by terrestrial mammals. A total of 556 big game crossings were constructed in areas known by state and federal biologists as routes traditionally used by moose, bison, and/or caribou. Designated big-game crossings have been designed and maintained along the length of the pipeline. Big game crossings appear as elevated sections (10 feet high and 60 feet long), short buried sections (i.e. sagbend crossings), or long refrigerated buried sections.

STIPULATION 2.6. MATERIALS SITES

Stipulation 2.6.1. Purchase of Materials

Stipulation 2.6.1.1. If Lessees require materials from State Land, Lessees shall make application to purchase such materials in accordance with appropriate State laws and

regulations. No materials may be removed from State Land by Lessees without the written approval of the Pipeline Coordinator.

Stipulation 2.6.1.2. Insofar as possible, use of existing materials sites will be authorized in preference to new sites.

Stipulation 2.6.1.3. Gravel and other construction materials shall not be taken from stream beds, river beds, lake shores or outlets of lakes, unless the taking is approved in writing by the Pipeline Coordinator.

Stipulation 2.6.2. Layout of Materials Sites

Stipulation 2.6.2.1. Materials site boundaries shall be shaped in such a manner as to blend with surrounding natural land patterns. Regardless of the layout of materials sites, primary emphasis shall be placed on prevention of soil erosion and damage to vegetation.

Scope

This provision applies to all material purchases from public lands during all phases of TAPS. It also applies to all construction material acquisition and to material sites utilized during all phases of TAPS.

Summary

This stipulation addresses Lessees purchase of materials and specifically requires State Pipeline Coordinator approval for use of materials from stream beds, river beds, lake shores or outlets of lakes. It also requires material site boundaries to be shaped to blend with surrounding land patterns. Material sites shall also be placed and designed to prevent erosion and minimize damage to vegetation.

Compliance

There are no compliance issues related to stipulation 2.6 not addressed to the satisfaction of the State Pipeline Coordinator. JPO Assessments ANC-01-A-005 and ANC-01-A-009 were conducted to evaluate Alyeska compliance with the requirements of the lease stipulation 2.6, provisions of the state material sale contracts, and the mining and reclamation plans for each site. JPO policy requires annual inspection of the sites on state land. In 2001, there were 68 active material sites used by Alyeska along the TAPS corridor, 42 sites on Federal land and 26 sites on state land.

These assessments report the results of surveillances conducted by various JPO staff members between August 4 - August 30, 2000 and August 20 – September 13, 2001. The surveillances consisted of on-site inspection of the material sites and Alyeska pump station case-files. A total of 65 (2000) and 66 (2001) material sites and 66 (2000) and 68 (2001) case-files were inspected. In addition, the JPO CMP database was reviewed for the period 1997 to 2001. The JPO CMP database (for the period 1997-2001) contains reference to four assessments, one technical report and 318 surveillances related to

stipulation 2.6. A total of 4,961 attributes were examined. There were four findings associated with this stipulation, all of which have been closed.

The general provisions of the lease listed above state Alyeska shall comply with the applicable state laws and regulations in addition to the stipulations and conditions of the lease. Alyeska has met these requirements through a mining and reclamation plan for each material approved by the Commissioner of the Department of Natural Resources.

Following is a list of actions JPO requires Alyeska to perform prior to June 1, 2002:

- Provide updates to JPO of the Mining and Reclamation Plans for OMS 83-1 and 83-2.
- Complete the repairs to the eroded dike at OMS 38-1R.

Alyeska completed the required actions for OMS 83-1 and 83-2 and completed the repairs to the spur dike at OMS 38-1R as documented in Alyeska Letter No. 01-17968.

Obtaining a material site contract does not suffice to comply with this stipulation. The Lessees are to obtain the State Pipeline Coordinator's written approval prior to removal of materials for any given project.

No material was taken from any of the material sites without current material sale contracts. Alyeska submitted mining plans in accordance with 43 CFR, Part 23 as well as the appropriate state laws and regulations for all of the active material sites.

Alyeska has not opened any new material sites in several years. They are using existing materials sites; therefore, they meet the requirements of stipulation 2.6.1.2.

The State Pipeline Coordinator will not approve the taking of gravel or other construction materials from streambeds, riverbeds, lakeshores, or outlets of lakes until the Lessees have obtained all necessary permits. The Lessees may require permits from the COE, DNR, BLM and other federal and state agencies to conduct such activities. The State Pipeline Coordinator approved all material sales for gravel taken from waterways in advance. There are currently no active material sale contracts from riverbeds.

On-site inspections of all material sites revealed no excessive damage to vegetation. One site, OMS 38-1R, showed signs of soil erosion in the dike on the southern boundary. If the potential breach is not repaired, this site will not meet the requirements of this stipulation. The dike must be repaired by June 1, 2002.

Stipulation 2.7. Clearing

Stipulation 2.7.1. Boundaries

Stipulation 2.7.1.1. Lessees shall identify approved clearing boundaries on State Land on the ground for each Construction Segment prior to beginning clearing operations. All timber and other vegetative material outside clearing boundaries and all blazed, painted

or posted trees which are on or mark clearing boundaries are reserved from cutting and removal with the exception of danger trees or snags designated as such by the Pipeline Coordinator.

Stipulation 2.7.2. Timber

Stipulation 2.7.2.1. Prior to initiating clearing operations on State Land, Lessees shall notify the Pipeline Coordinator of the amount

Stipulation 2.7.2.2. All trees, snags, and other woody material cut in connection with clearing operations shall be cut so that the resulting stumps shall not be higher than six (6) inches measured from the ground on the uphill side.

Stipulation 2.7.2.3. All trees, snags, and other woody material cut in connection with clearing operations shall be felled into the area within the clearing boundaries and away from water courses.

Stipulation 2.7.2.4. Hand clearing shall be used in areas on State Land where the Pipeline Coordinator determines that use of heavy equipment would be detrimental to existing conditions.

Stipulation 2.7.2.5. All debris resulting from clearing operations and construction that may block stream flow, delay fish passage, contribute to flood damage, or result in stream bed scour or erosion shall be removed.

Stipulation 2.7.2.6. Logs shall not be skidded or yarded across any water course without the written approval of the Pipeline Coordinator.

Stipulation 2.7.2.7. No log landing shall be located within three hundred (300) feet of any water- course on State Land except with the written approval of the Pipeline Coordinator.

Stipulation 2.7.2.8. All slash shall be disposed of in construction pads or Access Roads on State Land unless otherwise directed in writing by the Pipeline Coordinator.

NOTE: The State Pipeline Coordinator and Authorized Officer jointly issued the JPO Brushing Policy in January 2001. This policy outlines special provisions for Alyeska brushing activities and is included in its entirety in stipulation 2.4.

Scope

This stipulation applies to all clearing of timber and vegetative material for construction during all phases of TAPS. Also specifically required:

- All debris resulting from clearing operations and construction that may block stream flow, delay fish passage, contribute to flood damage, or result in stream bed scour or erosion shall be removed.

- Logs shall not be skidded or yarded across any water course without the written approval of the Pipeline Coordinator.
- No log landing shall be located within 300 feet of any water course on State Land except with the written approval of the Pipeline Coordinator

Summary

This stipulation provides the process that Lessees shall use to clear areas of state land. The disposition of the timber and debris are specified.

Compliance

There are no compliance issues related to stipulations 2.7. JPO Technical Report, FBU-01-E-006 summarizes JPO activities related stipulation 2.7. For the period 1997-2001, The JPO CMP database contains reference to three technical reports and 13 surveillances related to stipulation 2.7. A total of 46 attributes were examined. There were no findings associated with this stipulation.

In 1998 Alyeska notified the JPO that two trees outside of the TAPS right-of-way had been removed without prior authorization. The JPO responded by issuing a letter that included corrective actions with a prescribed timeframe to complete these actions. Subsequent correspondence from Alyeska provided adequate detail to determine that the corrective actions were implemented within the required timeframe. In addition, minor procedural processes were implemented by Alyeska to help prevent future occurrences.

STIPULATION 2.8. DISTURBANCE OF NATURAL WATER

Stipulation 2.8.1. All activities of Lessees in connection with the Pipeline that may create new lakes, drain existing lakes, significantly divert natural drainage, permanently alter stream hydraulics, or disturb significant areas of stream beds on State Land are prohibited unless such activities along with necessary mitigation measures are approved in writing by the Pipeline Coordinator.

Scope

This stipulation applies during all phases of TAPS.

Summary

This stipulation prohibits Lessees from creating new lakes, drain existing lakes, significantly divert natural drainage, permanently alter stream hydraulics, or disturb significant areas of stream beds on State Land unless such activities along with the necessary mitigation measures are approved by the State Pipeline Coordinator. The State Pipeline Coordinator's current interpretation of necessary mitigation measures encompasses those measures necessary to:

1. Avoid an adverse impact altogether by not taking an action.
2. Minimize an adverse impact by limiting the degree of magnitude of an action.
3. Rectify the impact by repairing, rehabilitating or restoring a disturbed natural water to its original or normal physical condition and natural biological

- productivity and diversity by means of best practicable technology available with the intent of reestablishing native plant and animal species.
4. Reduce or eliminate an adverse impact over time by conducting specific actions during the life of the action.
 5. Compensate for an adverse impact by replacing or providing substitute natural resources or environments of equal natural value.

Compliance

There are no compliance issues related to stipulations 2.8. JPO Assessment Report ANC-02-A-009 summarizes JPO activities associated with stipulation 2.8. The JPO CMP database references 13 oversight reports (12 surveillances and one assessment) related to stipulation 2.8. A total of 36 attributes were examined. There were no compliance findings associated with this stipulation.

The State Pipeline Coordinator will not approve activities that may create new lakes, drain existing lakes, significantly divert natural drainages, permanently alter streams, or disturb significant areas of stream beds until the Lessees have obtained all necessary permits. Permits may be required under the Rivers and Harbors Act (404 permits), the Clean Water Act, or other federal statutes. The Lessees must obtain an ADF&G Fish Habitat Permit for any activity that disturbs natural waters containing fish pursuant to AS 16.05.840 or AS 16.05.870.

Based on a review of Alyeska's requests for authorization and the corresponding JPO replies and approvals, the procedures in place effectively provide for appropriate review of proposed actions and the identification of mitigation to prevent unnecessary impacts to water bodies along the right-of-way. The JPO letters cover the respective authorities of the USBLM, ADNR and ADF&G (JPO Assessment No. ANC-02-A-009).

STIPULATION 2.9. OFF RIGHT-OF-WAY TRAFFIC

Stipulation 2.9.1. Lessees shall not operate mobile ground equipment off the designated construction zone in the Right-of-Way, Access Roads, State highways, or authorized areas, unless approved in writing by the Pipeline Coordinator or when necessary to prevent harm to any person.

Scope

This stipulation applies during all phases of TAPS.

Summary

This section restricts the Lessees from operating mobile ground equipment on state lands off the right-of-way without written approval by the State Pipeline Coordinator, or if necessary to prevent immediate harm to any person or property.

Compliance

There are no compliance issues related to stipulations 2.9. JPO Assessment Report ANC-01-A-006 summarizes JPO activities associated with stipulation 2.9. The JPO CMP

database references 24 oversight reports (18 surveillances, three technical reports and three assessments) related to stipulation 2.9. A total of 31 attributes were examined. There was one compliance finding associated with this stipulation, which has been closed.

Research of stipulation 2.9.1 authorizations issued for the last five years revealed Alyeska consistently requested off right-of-way authorizations when necessary to complete projects objectives. The research revealed two incidents of Alyeska taking equipment off the right-of-way without proper authorization. The first incident occurred on federal land during the construction of a revetment on the Middle Fork Koyukuk River at PLMP 218.5 and was closed by JPO Letter No. 00-059-JH dated September 7, 1999. The second incident occurred on state land at Brown's Creek, PLMP 784.4 on June 8, 2000. Because most of the activity occurred within Containment Site 12-8, there was no damage to vegetation, and Brown's Creek is not classified as a fish stream, the State Pipeline Coordinator did not require corrective action for this incident.

STIPULATION 2.10. AESTHETICS

Stipulation 2.10.1. Lessees shall consider aesthetic values in planning, construction and operation of the Pipeline. Where the Right-of-Way crosses a State highway in forested terrain, the straight length of the Pipeline Right-of-Way visible from the highway shall not exceed six hundred (600) feet in length, unless otherwise approved in writing by the Pipeline Coordinator. The Pipeline Coordinator may impose such other requirements as he deems necessary to protect aesthetic values.

Scope

This stipulation applies during all phases of TAPS.

Summary

This stipulation specifies that where the ROW crosses a state highway in forested terrain, the straight length of the pipeline ROW visible from the highway shall not exceed six hundred feet in length, unless otherwise approved in writing by the State Pipeline Coordinator.

Compliance

There are no compliance issues related to stipulations 2.10. JPO Assessment Report FBU-01-A-004 summarizes JPO activities associated with stipulation 2.10. The JPO CMP database references 6 oversight reports (5 surveillances and one assessment) related to stipulation 2.10. A total of 12 attributes were examined. There were no compliance finding associated with this stipulation.

The TAPS right-of-way crosses the State Highway System a total of 39 times, however, seven of these crossings are within treeless areas (north of the Books Range) leaving a total of 32 crossings subject to stipulation 2.10. JPO Assessment Report FBU-01-A-004 concluded that the Lessees were in compliance with the requirements of this stipulation.

STIPULATION 2.11. USE OF EXPLOSIVES

Stipulation 2.11.1. Lessees shall submit a plan for use of explosives on State Land, including but not limited to blasting techniques, to the Pipeline Coordinator in accordance with Stipulation 1.7.

Stipulation 2.11.2. No blasting shall be done under water or within one quarter (1/4) mile of streams or lakes without a permit from the Alaska Department of Fish and Game, when such a permit is required by State law or regulation.

Scope

This provision applies to any use of explosives associated with construction of the TAPS during all phases of TAPS. This stipulation applies to blasting associated with the TAPS in or within one-quarter mile of streams or lakes during all phases of TAPS.

Summary

This section requires the Lessees to submit plans pursuant to stipulation 1.7 for the use of explosives associated with right-of-way activities.

Compliance

There are no compliance issues related to stipulations 2.11. JPO Technical Engineering Report FBU-01-E-005, Revision 1 summarizes JPO activities associated with stipulation 2.11. The JPO CMP database references 3 oversight reports (two surveillances and one technical report) related to stipulation 2.11. A total of three attributes were examined. There were no compliance findings associated with this stipulation.

Alyeska implements blasting requirements through Alyeska Master Specification C-415 "Blasting Restrictions Near the Trans-Alaska Pipeline System". JPO Technical Engineering Report FBU-01-E-005, Revision 1 concluded that Alyeska is in compliance with the requirements of Stipulation 2.11.1, Use of Explosives.

STIPULATION 2.12. RESTORATION

Stipulation 2.12.1. Areas on State Land disturbed by Lessees shall be restored by Lessees to the satisfaction of the Pipeline Coordinator as stated in writing.

Stipulation 2.12.2. All cut and fill slopes on State Land shall be left in a stable condition.

Stipulation 2.12.3. Materials from Access Roads, haul ramps, beams, dikes, and other earthen structures on State Land shall be disposed of as directed in writing by the Pipeline Coordinator.

Stipulation 2.12.4. Vegetation, overburden and other materials removed during cleaning operations shall be disposed of by Lessees in a manner approved in writing by the Pipeline Coordinator.

Stipulation 2.12.5. Upon completion of restoration on State Land, Lessees shall immediately remove all equipment and supplies from the site.

Scope

This stipulation applies during all phases of TAPS.

Summary

This section requires the Lessees, upon completion of use, to restore all areas of state land disturbed during pipeline activities. The stipulation defines restoration, and establishes the minimum criteria for complete restoration. Restoration includes revegetation of disturbed areas, disposal of road and pad materials, and erosion stabilization measures. This stipulation requirement is most applicable during termination proceedings, but also applies following construction and modification projects, or if part or all of the right-of-way is withdrawn.

Compliance

There are no compliance issues related to stipulations 2.12. JPO Assessment ANC-01-A-015 summarizes JPO activities associated with stipulation 2.12. The JPO CMP database references 17 oversight reports (14 surveillances and three assessments) related to stipulation 2.12. A total of 52 attributes were examined. There were two compliance findings associated with this stipulation, which have been closed.

Early JPO surveillance and monitoring of stipulation 2.12 focused on the requirements of Alyeska's Erosion Control for Maintenance Operations, EP-106. The JPO approved this document, which contained Alyeska's revegetation and restoration guidelines. In 2001, the JPO rescinded approval of EP-106 and transmitted to Alyeska "Restoration Performance Requirements Pursuant to Stipulation 2.12.1" (JPO Letter No. 01-111-DG). The letter defined disturbance as an area in which there has been *"a departure or change from original natural conditions which can be attributed to direct or indirect effects of Permittees' or Lessees' activities or the Pipeline System"*. Restoration was defined as *"returning a disturbed site (excluding routine workpad maintenance activities e.g. brushing, corrosion or valve excavation unless it affects critical habitat or driveway maintenance activities) to its original or normal physical condition and natural biological productivity and diversity by means of best practicable protection, stabilization, erosion control, habitat reconstruction, and revegetation techniques with the intent of re-establishing native plant and animal species"*. The JPO further required *"that disturbed area restoration be completed as soon as practicable after the disturbance; and, in the case of work pads, access roads, dikes, and similar long-term earthen structures, upon completion of use"*.

The performance criteria for current compliance evaluation are:

1. Remove all contaminated material;
2. To the extent possible, return a disturbed site to its original or normal physical condition and natural biological productivity and diversity with re-establishment of native plant and animal species;

3. Prevent erosion;
4. Conform to the adjoining land forms and approximate the original land contours;
5. Maintain pipeline system integrity;
6. Remove improvements as required by the appropriate authority; and
7. Provide for public safety.

The 2002 JPO Work Plan will include a significant level of effort to monitor completion of use disturbed areas pursuant to these performance criteria.

STIPULATION 2.13. REPORTING OF OIL DISCHARGES OR OTHER POLLUTION

Stipulation 2.13.1. A discharge of Oil or other pollutant by Lessees in violation of applicable laws of the State of Alaska and regulations issued thereunder, is prohibited. Lessees shall give immediate notice of any such discharge to: (1) the Pipeline Coordinator; and (2) such other State officials as are required by law to be given such notice.

Stipulation 2.13.2. Lessees shall give immediate notice of any spill or leakage of Oil or other pollutant from the Pipeline, the Valdez terminal facility, or any storage or refueling facility or equipment to: (1) the Pipeline Coordinator; and (2) such State and Federal are by law to be given such notice. Any oral notice shall be confirmed in writing as soon as possible.

Scope

This stipulation applies during all phases of TAPS.

Summary

This stipulation establishes the notice requirements for any spill or leakage of oil or other pollutants from the pipeline, VMT and any storage or refueling facility or equipment.

Compliance

The JPO staff includes Liaisons from the Alaska Department of Environmental Conservation (ADEC) and Environmental Protection Agency (EPA). These Liaisons and a JPO/BLM employee form the JPO Oil Spill Team. The State Pipeline Coordinator relies on this Team for technical expertise on issues involving oil spill contingency planning and response activities. ADEC and EPA provided the State Pipeline Coordinator or Authorized Officer with 2001 Compliance Reports that find Alyeska in compliance with relevant state and federal laws (Attachment 2).

There are also no Lease compliance issues related to stipulations 2.13. JPO Assessment ANC-02-A-010 summarizes JPO activities associated with stipulation 2.13. The JPO CMP database references 14 oversight reports (12 surveillances, two technical reports and one assessment) related to stipulation 2.12. A total of 16 attributes were examined. There were no compliance findings associated with this stipulation.

Spills must be reported to several government agencies. In addition to the Authorized Officer and the State Pipeline Coordinator, spills must be reported to the Alaska Department of Environmental Conservation and the National Response Center (which in turn notifies the U.S. Coast Guard or Environmental Protection Agency, as appropriate).

A single set of reporting requirements were developed and sent to Alyeska on Dec. 21, 1994 (JPO Letter No. 94-231-T).

Alyeska's internal spill reporting protocol is described in Section 7.4 of their Environmental Protection Manual, EN-43. A summary of the requirements for reporting spills to government agencies is contained in Section 1.3.3 of the Pipeline Oil Discharge Prevention and Contingency Plan (Alyeska document CP-35-1).

Compliance with this stipulation was assessed through a review of Alyeska documents on reporting procedures and submitted spill reports and the JPO CMP database. Spills are reported according to four protocols including telephone contact with an electronic report (fax, e-mail or line printer), electronic report, weekly letter, or monthly log. Which protocol is used depends on the substance spilled, the amount spilled and whether the spill is to water, to land, within secondary containment, within a building, or to air.

Weekly letters (one covering the pipeline and one for the Valdez Marine Terminal) and monthly logs are reviewed on receipt. No discrepancies from reporting requirements have been noted. The JPO is not aware of any failure to report a spill.

STIPULATION 2.14. CONTINGENCY PLANS

Stipulation 2.14.1. It is the policy of the Department of Natural Resources that there should be no discharge of Oil or other pollutant into or upon lands or waters of the State. Lessees must therefore recognize their prime responsibility for the protection of the public and environment from the effects of spillage.

Stipulation 2.14.2. Lessees shall submit their contingency plans to the Pipeline Coordinator at least one hundred eighty (180) days prior to scheduled start-up. The plans shall conform to this Stipulation and shall: (1) include provisions for Oil Spill Control; (2) specify that the action agencies responsible for contingency plans in Alaska shall be among the first to be notified in the event of any Pipeline failure resulting in an Oil spill; (3) provide for immediate corrective action including Oil Spill Control and restoration of the affected resource; (4) provide that the Pipeline Coordinator shall approve any materials or devices used for Oil Spill Control and shall approve any disposal sites or techniques selected to handle oily matter; and (5) include separate and specific techniques and schedules for cleanup of Oil spills on land, lakes, rivers and streams, sea, and estuaries.

Stipulation 2.14.3. Prior to Pipeline start-up, such plans shall be approved in writing by the Pipeline Coordinator, and Lessees shall demonstrate their capability and readiness to execute the plans. Lessees shall update as appropriate the plans and methods of imple-

mentation thereof, which shall be submitted annually to the Pipeline Coordinator for his written approval.

Stipulation 2.14.4. If during any phase of the construction, operation, maintenance or Termination of the Pipeline, any oil or other pollutant should be discharged from the Pipeline, the Valdez terminal facility, or any storage or refueling facility or equipment, the control and total removal, disposal and cleaning up of such Oil or other pollutant, wherever found, shall be the responsibility of Lessees, regardless of fault. Upon failure of Lessees to control, dispose of, or clean up such discharge, the Pipeline Coordinator may take measures as he deems necessary to control and clean up the discharge at the full expense of Lessees. Such action by the Pipeline Coordinator shall not relieve Lessees of any responsibility as provided herein.

Scope

Except for 2.14.3, this stipulation applies during all phases of TAPS. Stipulation 2.14.4 applies for the life of the legal relationship, which may extend beyond the term of the Agreement.

Summary

This section establishes contingency planning and reporting requirements for spills or discharges of oil or hazardous substances in connection with all pipeline system activities.

Compliance

The JPO staff includes Liaisons from the Alaska Department of Environmental Conservation (ADEC) and Environmental Protection Agency (EPA). These Liaisons and a JPO/BLM employee form the JPO Oil Spill Team. The State Pipeline Coordinator relies on this Team for technical expertise on issues involving oil spill contingency planning and response activities. ADEC and EPA provided the State Pipeline Coordinator or Authorized Officer with 2001 Compliance Reports that find Alyeska in compliance with relevant state and federal laws (Attachment 2).

There are also no Lease compliance issues related to stipulation 2.14. JPO Assessment ANC-02-A-010 summarizes JPO activities associated with stipulation 2.14. The JPO CMP database references 73 oversight reports (57 surveillances, 10 technical reports and six assessment) related to stipulation 2.14. A total of 173 attributes were examined. There was one compliance finding associated with this stipulation, which has been closed.

Stipulation 2.14.3 JPO Assessment JPO No. ANC- 02-A-010 focused on a field inventory of Alyeska's oil spill response equipment. During 2001, all pump stations with oil spill response equipment were visited and the equipment inventories were checked. Also, maintenance records for oil spill response were checked. There were no significant discrepancies in the equipment inventories and all equipment appeared to be in very good to excellent condition. The equipment inventories included opening randomly selected pallets and inventorying the contents, and starting randomly selected motorized

equipment. (JPO Surveillances ANC-01-S-003 through - 008, JPO Letter No. 01-109-DG, and DEC letter to Alyeska, April 10, 2001).

Some inconsistencies were noted in the maintenance records for smaller pieces of equipment. As a result, Alyeska examined its preventative maintenance program for this spill response equipment and proposed improvements for tracking maintenance of the equipment. (DEC letter to Alyeska, April 10, 2001 and Alyeska responses Government Letter No. 01- 17176, May 23, 2001 and 01-17341, July 10, 2001).

In addition to observing scheduled field exercises, including a joint Fairbanks Business Unit/Valdez Business Unit exercise on the Lowe River and the Port of Valdez (Surveillance ANC-01-S-015), JPO reviewed the exercise documentation at Pump Stations 1, 3, 4, 5 and 6. The records were compared to the requirements contained in the *Fairbanks Business Unit Oil Spill Response Exercise Program for the Trans Alaska Pipeline System*. In general, exercise documentation packages were complete, well organized and followed pre-developed format and contents. Individual stations are following the three-year exercise schedule and conducted exercises per the pump station and contingency plan scenario schedules. Alyeska personnel involved in planning, conducting and documenting these exercises are commended for their work (JPO Letter No. 01-109-DG and surveillances ANC-01-S-003 through -008).

Four unannounced exercises were held during fiscal year 2001. On September 29, 2000 members of JPO's Oil Spill Team arrived at Pump Station 7 and at the gate of the Fairbanks Nordale Yard facility. The exercise package was delivered to the Operations and Maintenance Supervisor. The scenario required reconnaissance between Pump Stations 7 and 8. Agency representatives rode with each recon team. The objective of the exercise was to implement the reconnaissance as described in the C-Plan. Alyeska performed satisfactorily.

Drill observations were recorded in the Drill Evaluation Report (JPO Letter No. 00-068-JH, October 6, 2000). The follow-up actions are described in Alyeska Government Letter No. 00-16399, (October 19, 2000).

On December 21, 2000, JPO called an announced call up exercise for Alyeska's Fairbanks Business Unit. The objective was to identify and verify the availability of qualified personnel to fill key positions in the Incident Management Team for a two shift, 24 hour operation. On December 28, 2000, a similar exercise was conducted at Alyeska's Valdez Business Unit. The objective was successfully met by both organizations, (JPO Letter No. 01-014-CA, January 19, 2001).

On May 30, 2001 the Oil Spill Team presented an unannounced exercise at Pump Station 5, with 4 objectives revolving around a leaking tank scenario. All objectives were successfully met (Surveillance Report ANC-01-S-002). The Maintenance coordinator, who was the pre-designated initial incident commander and responsible for much of the organization's performance in the scenario, was fairly new to Pump Station 5 being on his second shift there. Pump Station 5 (like other pump stations) has a standard procedure of pre-designating individuals to an Incident Command Organization Chart at the start of

each and every two week shift. This allowed the initial incident commander to immediately identify and contact the appropriate individuals to respond effectively to the scenario.

While none of these unannounced exercises completely tested Alyeska's ability to respond to a major event, they do demonstrate that the components of a successful response were present.

Stipulation 2.14.4 directs Alyeska to be appropriately prepared to respond to an oil spill. The ultimate test of compliance is responding to an actual spill. On October 4, 2001 such a spill occurred. Pipeline security was alerted of suspicious behavior near the pipeline and discovered the bullet holes had penetrated the pipeline. Proper telephonic notice was given according to regulatory requirements. An incident command organization, consistent with the approved C-Plan and the State-Federal Unified Plan, was formed and included a Federal On-Scene Coordinator and a State On-Scene Coordinator as the Unified Command.

3. TECHNICAL

STIPULATION 3.1. GENERAL

Stipulation 3.1.1. The following standards shall be complied with in design, construction, Operation and Termination of the Pipeline.

STIPULATION 3.2. PIPELINE SYSTEM STANDARDS

Stipulation 3.2.1. General Standards

Stipulation 3.2.1.1. All design, material and construction, operation, maintenance and Termination practices employed in the Pipeline shall be in accordance with safe and proven engineering practice and shall meet or exceed the following standards:

- (1) U.S.A. Standard Code for Pressure Piping, ANSI B 31.4, "Liquid Petroleum Transportation Piping System."
- (2) Department of Transportation Regulations, 49 CFR, Part 195, "Transportation of Liquids by Pipeline."
- (3) ASME Gas Piping Standard Committee, 15 Dec. 1970: "Guide for Gas Transmission and Distribution Piping System."
- (4) Department of Transportation Regulations, 49 CFR, Part 192, "Transportation of Natural and Other Gas by Pipelines; Minimum Federal Safety Standards."
- (5) API Stds 1104, "Welded Pipelines and Related Facilities", 11th edition.
- (6) API Stds 620, "Low Pressure Storage Tanks".
- (7) API Stds 650, "Welded Steel Tanks for Oil Storage".

Stipulation 3.2.1.2. Requirements in addition to those set forth in the above minimum standards may be imposed by the Commissioner as necessary to reflect the impact of subarctic and arctic environments. If any standard contains a provision which is inconsistent with a provision in another standard, the more stringent shall apply.

Stipulation 3.2.2. Special Standards

Stipulation 3.2.2.1. The design shall also provide for remotely controlled shutoff valves at each pump station; remotely controlled mainline block valves (intended to control spills); and additional valves located with the best judgment regarding wildlife habitat, fish habitat, and potentially hazardous areas.

Stipulation 3.2.2.2. All practicable means shall be utilized to minimize injury to the ground organic layer.

Stipulation 3.2.2.3. Radiographic inspection of all main line girth welds and pressure testing of the Pipeline, or other inspection techniques approved by the Pipeline Coordinator, shall be conducted by Lessees prior to placing the system in operation.

Stipulation 3.2.2.4. Lessees shall provide for continuous inspection of Pipeline construction to ensure compliance with the approved design specifications and these Stipulations.

Stipulation 3.2.2.5. Welder qualification tests shall be by destructive means, except that operators of automatic welding equipment for girth welding of tank seams shall be tested by radiography in accordance with ASME Boiler and Pressure Vessel Code, Section 9, Subsection Q-21 (b).

Stipulation 3.2.2.6. Lightning protection shall conform to the requirements of ANSI C5.1 - 1969, "Lightning Protection Code - 1968."

Stipulation 3.2.3. Standards for Access Roads

Stipulation 3.2.3.1. Design, materials and construction practices employed for Access Roads shall be in accordance with safe and proven engineering practice and in accordance with principles of construction for secondary roads for the subarctic and arctic environments.

Stipulation 3.2.3.2. Lessees shall submit a layout of each proposed Access Road on State Land for approval by the Pipeline Coordinator in accordance with Stipulation 1.7.

Stipulation 3.2.3.3. Access Roads shall be constructed to widths suitable for safe operation of equipment at the travel speeds proposed by Lessees.

Stipulation 3.2.3.4. The maximum allowable grade shall be 12 percent unless otherwise approved in writing by the Pipeline Coordinator.

Scope

This stipulation applies to all design, material and construction, operation, and maintenance, and termination practices employed on the TAPS during all phases of TAPS. It also applies to all design of the above valves; TAPS facilities requiring lightning protection; the design, materials, and construction practices employed for all Access Roads; and requires the Lessees to employ all practicable means to minimize injury to the ground organic layer from disturbance by new or ongoing construction, maintenance, operation, and termination activities.

Summary

This stipulation is to assure that design, including material, and construction, operation and maintenance are in accordance with sound engineering principles.

Compliance

There are no compliance issues related to stipulation 3.2. The JPO CMP database references 134 oversight reports (94 surveillances, 34 technical reports and six assessments) related to stipulation 3.2. A total of 447 attributes were examined. There were 11 compliance findings associated with this stipulation, all of which have been closed. JPO Assessment ANC-02-E-007, "An Evaluation of Alyeska Pipeline's Compliance with the Federal Agreement and Grant of Right-of-Way and State Right-of-Way Lease, Stipulation 3.2: Pipeline Safety Standards" provides a detailed summary of information contained in the CMP database.

The JPO staff includes Engineers from ADNR, USDOT and BLM. The State Pipeline Coordinator relies on these Engineers for technical expertise to evaluate Alyeska's activities with respect to sound engineering principles. ADEC and EPA provided the State Pipeline Coordinator or Authorized Officer with 2001 Compliance Reports that find Alyeska in compliance with relevant state and federal laws.

The United States Department of Transportation's (DOT) Research and Special Programs Administration (RSPA), acting through the Office of Pipeline Safety (OPS), administers the Department's national pipeline safety regulatory program, pursuant to Chapter 601 of 49 United States Code to assure the safe transportation of natural gas, petroleum, and other hazardous materials by pipeline. The OPS develops and enforces regulations to assure safety in design, construction, testing, operation, maintenance, and emergency response of pipeline facilities. In addition, OPS incorporates industry standards from the American Petroleum Institute, the American Society of Mechanical Engineers, the National Fire Protection Association, and other standard organizations to enforce their Pipeline Safety Regulations. Since 1986, the entire pipeline safety program has been funded by a user fee assessed on a per mile basis on each pipeline operator OPS regulates.

In 2000 and 2001, OPS conducted a thorough regulatory compliance and system integrity analysis of key TAPS operation and maintenance systems. The compliance inspections focused on:

- Geotechnical stability and pipeline support
- Corrosion control
- Supervisory Control and Data Acquisition (SCADA)
- Hydraulic and over pressure controls
- Mainline valves
- Relief tanks
- Oil spill contingency plans and response

Federal regulations 49 CFR, Parts 190 through 199 require Alyeska to manage and maintain the Trans-Alaska Pipeline System according to regulatory and sound engineering practice. As a result of OPS comprehensive regulatory compliance inspections the following enforcement actions occurred:

1) *Notice of Probable Violation, Proposed Civil Penalty, and Proposed Compliance Order* (CPF # 5 2000 5018, Sept. 14, 2000), notifying Alyeska of three probable violations of pipeline safety regulations Title 49, Code of Federal Regulations, Parts 195. The probable violations related to:

- Item 1: not having updated maps/records of the North Pole Metering facility. Alyeska was ordered to update their as-built drawings for the North Pole Metering facility.
- Item 2: pressure safety valves were improperly set following the hydrostatic testing of the meter skid at the North Pole Metering facility. Alyeska was assessed a civil penalty of \$25,000 and ordered to either lower the MOP or redo the hydrostatic testing to higher pressure. Alyeska retested the facility to 1800 psig to establish an MOP of 1400 psig.
- Item 3: improperly securing the North Pole Metering facility. Alyeska was ordered to improve security at the front gate of the North Pole Metering facility. They reconstructed the facilities front gate. The final order was issued on March 14, 2001. The case concurrently closed when Alyeska did not contest any of the allegations, corrected all deficiencies and paid the fines.

2) *Notice of Probable Violation and Proposed Compliance Order* (CPF # 5 2001 0012, December 3, 2001) notified Alyeska of three probable violations of pipeline safety regulations Title 49, Code of Federal Regulations, Parts 192 on its fuel gas line. The violations related to an improperly designed valve vault; an exposed “buried” pipe at MP 84 hill; and outdated operations and maintenance manual. The NOPV was submitted to Alyeska and future actions are pending OPS review of Alyeska’s response.

3) *Notice of Probable Violation, Proposed Civil Penalty and Compliance Order* (CPF No. 5 2002 5003, February 6, 2002) related to: tripped VSM anchors at Mile Post 170; not safely repairing the pipeline after Alyeska bypassed Pump Station 12, which increased the pressure at a site they were excavating; and not having appropriate pressure safety valve assessed. The NOPV records. A civil penalty of \$80,000 was has been submitted to Alyeska. Future actions are pending OPS review of Alyeska’s response.

4) Based on the JPO investigation of the Trans-Alaska Pipeline bullet accident on October 4, 2001, the USDOT/OPS issued a *Warning Letter* (CPF 5 2002 5001, January 2, 2002) notifying Alyeska of its failure to file a written report to USDOT/OPS within 30

days. The report was not submitted until 57 days after the accident. Alyeska was notified that a similar future occurrence could result in an assessed civil penalty.

In addition to calendar year 2000 violation inspections, OPS also continued to follow up on probable violations issued during previous years. Those actions include:

1) *Notice of Probable Violation, Proposed Civil Penalty and Compliance Order* (CPF No. 5 2000 5006, February 10, 2000), relating to over pressure of the pipeline at Pump Station 5, settlement of the pipeline at Mile Post 652, to inadequate cathodic protection of Relief Tank 190. A civil penalty of \$75,000 was proposed. An administrative hearing was conducted in February 2001, and the case is under final consideration by the hearing officer.

2) *Notice of Probable Violation, Proposed Civil Penalty and Compliance Order* (CPF No. 59502, March 5, 1999) notified Alyeska of three probable violations of pipeline safety regulations Title 49, Code of Federal Regulations, Parts 195. The probable violations related to:

Item 1: TAPS over pressure at Mile Post 568, and at Pump Station 7. Alyeska was assessed a civil penalty of \$50,000 and issued an order to review and modify pipeline operational procedures and controls.

Item 2: cracked fiberglass coating on above ground pipe at transition joints. Alyeska was issued an order to assess all such coating on the pipeline and repair those that are cracked.

Item 3: the fuel gas line became exposed at MP 13.02 and 16.57 and was washed out and lying in water at MP 78.6, 86, 84 mile hill, and 120 APS. The compliance order required Alyeska to take all practicable steps to protect its fuel gas line and associated appurtenances in those areas from future detrimental movement and external forces.

A final order was issued on May 8, 2001. Alyeska complied with all aspects of the proposed compliance order and the case was closed concurrently.

Stipulation 3.2.2.1 This mainline valve-related stipulation is important for two reasons. First, it provides authority to require additional mainline valves for shutdown pump stations. Second, while it has not been so used, it could provide additional authority for the replacement of valves with significant and consequential leak through. The State Pipeline Coordinator and Authorized Officer are satisfied with the number and location of current TAPS mainline valves. Valve testing, maintenance and replacement have been discussed in prior CMP reports (*April 1999 TAPS Maintenance CMP*, pages 14-16; *1999-2000 TAPS Maintenance CMP*, pages 25-26). Three valves were replaced or repaired for leak through and a fourth, RGV 39, is scheduled for replacement in 2002. Check Valve 74, was replaced when it lost its seat ring (*1999/2000 Operations CMP*, pages 32-34).

Stipulation 3.2.2.3 Mainline girth welds were radiographically inspected at mainline valve replacements. Pressure testing at the VMT this year complied with requirements (JPO Surveillance VMT-01-S-035).

Stipulation 3.2.2.5 JPO twice verified that welder qualification tests were by destructive means (JPO Engineering report No. 00-E-029—Check Valve 74 replacement and Surveillance Report No. 00-S-026—Mile Post 710 sleeve). A third JPO surveillance,

JPO-99-S-097, documented that Alyeska welding plans captured the requirement for destructive testing for the RGV 60 replacement but JPO did not specifically verify this activity.

Stipulation 3.2.2.6 The DET NORSKE VERITAS (DNV) Progress Review Report (TAPS Owners' compliance review) questioned Alyeska's compliance with this stipulation. Alyeska and JPO entered into a Memorandum of Agreement (Alyeska Letter # 01-18019, December 20, 2001) and Alyeska agreed on a corrective action plan and schedule. A JPO summary of the DET NORSKE VERITAS audit of Alyeska compliance with Lease stipulations and state laws and regulations are provided in Appendix D of this document.

Stipulation 3.2.3.1-4 These stipulations involve standards for access roads. No new access roads were constructed in the last several years. In 2000, JPO wrote 13 surveillance reports (00-S-73, 74 and 83 to 93) closing out the work pad bridge audit action item that focused on upgrading bridges to meet Stipulation 3.6.1.2.1 and its 50-year flood design requirement. These surveillance reports were also coded to this stipulation for its "safe and proven engineering practice...for arctic and subarctic conditions."

STIPULATION 3.3. CONSTRUCTION MODE REQUIREMENTS

Stipulation 3.3.1.1. The selection of the Construction Mode (elevated or buried) on State Land shall be governed by the following criteria: (1) There shall be an unobstructed air space of at least two feet between the pipe and ground surface; or (2) there shall be no greater heat transfer from the pipe to the ground than results from the use of an unobstructed air space of at least two (2) feet between the pipe and ground surface; or (3) below the level of the pipe axis the ground shall consist of competent bedrock, soil naturally devoid of permafrost, or if frozen, of Thaw-Stable Sand and Gravel; 1/ above the level of the pipe axis other materials may be present but it must be shown that they will remain stable under all credible conditions; or (4) results of a detailed field exploration program and analysis indicate that pipe rupture and major terrain disruption will not occur at any place from soil instability. Effects and their interaction, which are to be analyzed on a mile by mile basis to justify the proposed Construction Mode, shall include but not be limited to, thaw plug stability, differential settlement, seismic loading and weakening, and possible movement resulting from slope instability. 2/

As a prerequisite for the use of this criterion, an acceptable comprehensive monitoring system of the Pipeline shall be developed which will include but not be limited to making deformation measurements sufficiently sensitive and prompt to detect the approach to operational tolerance limits (which shall be clearly specified) of the Pipeline; design specifications, operational requirements, and feasibility analysis of such monitoring system shall be submitted in accordance with Stipulation 1.7. Such system shall be operational prior to transmission of Oil through the Pipeline.

1/ Thaw-Stable Sand and Gravel is defined as material meeting the following requirements: (a) Material lies within the classes GW, GP, SW, and SP. (Unified Soil Classification) but with up to 6% by weight passing the #200 U.S. standard sieve; if an inorganic granular soil contains more than 6% fines than the #200 sieve, its thaw-stability must be justified. (b) There is no excess (segregated or massive) ice. (c) Thawing of the material in situ will not result in excess pore-pressure.

2/ Because of soil variability and/or, unique hydrologic conditions in active flood plains, some of the requirements of Stipulation 3.3.1. may not be met in those locations. In such cases proposed designs including special design and/or construction procedures where required by these conditions must be submitted with justification to the Pipeline Coordinator for approval in accordance with Stipulation 1.7.

Scope

This stipulation applies to the design of the main line pipe during all phases of TAPS.

Summary

This stipulation applies to construction or reconstruction of mainline pipe to assure the appropriate design for arctic and sub-arctic conditions are properly evaluated.

Compliance

There are no compliance issues related to stipulations 3.3. JPO Technical Report ANC-02-E-003 summarizes JPO activities associated with stipulation 3.3. The JPO CMP database references 1 oversight report (one technical report) related to stipulation 3.3. A total of 1 attribute was examined. There were no compliance findings associated with this stipulation.

The construction mode was selected for the original pipeline construction and approved by the State Pipeline Coordinator in accord with Stipulation 1.7.

There have been three projects to install new mainline pipe since start-up in 1977. The modification to the discharge pipe from Pump Station 3 was relocated from a belowground corridor to the aboveground construction mode in conformance with stipulation 3.3. The relocation of the mainline pipe at Mile Post 200 was constructed in the aboveground mode in conformance with stipulation 3.3. The reconstruction of the mainline pipe in Atigun River valley was installed adjacent to the original pipe in the buried construction mode and is in conformance with the requirements of stipulation 3.3.

STIPULATION 3.4. EARTHQUAKES AND FAULT DISPLACEMENTS

Stipulation 3.4.1. Earthquakes

Stipulation 3.4.1.1. The Pipeline shall be seismically designed, where technically feasible, by appropriate application of the best practicable technology available, to prevent any Oil leakage from the effects (including seismic shaking, ground deformation

and earthquake-induced mass movements) of earthquakes distributed along the route, as follows:

<i>Zone:</i>	<i>Richter Magnitude</i>
<i>Valdez to Willow Lake</i>	<i>8.5</i>
<i>Willow Lake to Paxton</i>	<i>7.0</i>
<i>Paxton to Donnelly Dome</i>	<i>8.0</i>
<i>Donnelly to Domedeg. N.</i>	<i>7.5</i>
<i>67 deg N Prudhoe Bay</i>	<i>5.5</i>

Stipulation 3.4.1.2. Where such design is not technically feasible, the potential damage from an Oil spill shall be minimized by special design provisions that shall include, but shall not be limited to: (1) a network of ground-motion detectors that continuously monitor, record and instantaneously signal the occurrence of ground motion in the vicinity of the Pipeline reaching the Operational Design Level 4/ (the critical levels of ground motions shall be approved in writing by the Pipeline Coordinator) (Operational Design Level is highest level that would not produce general pipe deformation sufficient to limit operations.); (2) rapid programmed shutdown and prompt close inspection of system integrity in the event of ground motion reaching the operational design level; and (3) a special contingency plan for Oil Spill Control for each such seismically hazardous area which shall be filed in accordance with Stipulation 2.14. This plan shall specifically consider expected field conditions in the particular area in the aftermath of a destructive earthquake.

Stipulation 3.4.2. Fault Displacements

Stipulation 3.4.2.1. Prior to applying for a Notice to Proceed for any Construction Segment on State Land, Lessees shall satisfy the Pipeline Coordinator that all recognizable or reasonably inferred faults or fault zones along the alignment within that Construction Segment have been identified and delineated, and that the risk of Oil leakage resulting from fault movement and ground deformation has been adequately assessed and provided for in the design of the Pipeline for that Segment. Evaluation of the risk shall be based on geologic, geomorphic, geodetic, seismic, and other appropriate scientific evidence of past or present fault behavior and shall be compatible with the design earthquakes tabulated above and with observed relationships between earthquake magnitude and extent and amount of deformation and fault slip within the fault zone.

Stipulation 3.4.2.2. Minimum design criteria for a segment of the Pipeline traversing a fault zone that is reasonably interpreted as active, shall be: (1) that the Pipeline resist failure resulting in leakage from two feet of horizontal and/or vertical displacement in the foundation material anywhere within the fault zone; and (2) that no storage tank or pump station be located within the fault zone on State Land. The Pipeline design must take into account possible seismic disturbance at known earthquake areas. Appropriate margins of safety against the adverse effects of a seismic disturbance are required. The

manner of pipe installation across the fault zone, location of valves on each side of the fault and monitoring system must be included in the design.

Stipulation 3.4.2.3. Where the Pipeline crosses a fault or lies within a fault zone on State Land that is reasonably interpreted as active, Lessees shall monitor crustal deformation in the vicinity of the Pipeline. Such monitoring shall include annual geodetic observation of permanent reference marks established on stable ground. The reference marks shall be positioned so as to form closed figures and to provide for detection of relative horizontal and vertical displacements as small as 0.10 ft. across principal individual faults within the fault zone and to provide for monitoring of crustal strain with an absolute error of two parts per million within the fault zone. Further, where annual slip on a fault exceeds 0.10 ft. for two successive years, Lessees shall install recording or telemetering slip-meters. Data obtained from the monitoring shall be provided to the Pipeline Coordinator at specified regular intervals throughout the operational life of the Pipeline. The data shall be used by the Lessees to aid in the initiation of corrective measures to protect the Pipeline from failure caused by tectonic deformation that would result in leakage.

Scope

This stipulation applies to the design of those TAPS systems that will 1.) contain oil or that will be critical to the operational integrity of TAPS systems that contain oil and 2.) the areas of these systems that are not technically feasible to be designed to prevent any oil leakage due to earthquakes as required in stipulation 3.4.1.1 during all phases of TAPS. It specifically applies to all areas in which the Pipeline crosses a fault or lies within a fault zone that is reasonably interpreted as active.

Compliance

There are no compliance issues related to stipulation 3.4 not resolved to the satisfaction of the State Pipeline Coordinator. JPO Technical Report ANC-02-E-002 summarizes JPO activities associated with stipulation 3.4. The JPO CMP database references 18 oversight reports (11 surveillances, six technical reports and one assessment) related to stipulation 3.4. A total of 112 attributes were examined. There were three compliance findings associated with this stipulation, of which one remains open.

The principle conclusions of JPO Assessment ANC-02-E-002, “Stipulation 3.4, Earthquakes and Fault Displacements” related to stipulation 3.4.1.1 were:

- The TAPS design basis ground motions are in agreement with current seismic engineering understanding of ground motions likely to occur along the Pipeline route from Pump Station 1 to the Valdez Marine Terminal.
- As a result of the work performed by Alyeska to close the BLM/QTC and TAPS Owners audits, the seismic integrity of TAPS has been thoroughly reviewed, and required seismic retrofit work has been completed.
- The seismic integrity of the pipeline, as designed, is dependent on proper maintenance by Alyeska and monitoring of the effects of changing (thawing) soil conditions on the effectiveness of the existing TAPS system design. These issues are

discussed in the JPO assessment reports on *Construction and Operations* and *Slope Stability*. In addition, the recently completed Above Ground Pipe Reliability Centered Maintenance analysis has identified monitoring and maintenance requirements necessary to assure Pipeline integrity. Timely maintenance is critical to assure the continued seismic integrity of the pipeline.

- Completion of the work items in the TAPS 2001 Earthquake Preparedness Plan (EPP) will strengthen the Alyeska Seismic Program and resolve most of the Findings of the Alyeska Seismic Program Audit. JPO will monitor the completion of the Items in the EPP and additional items proposed in Alyeska's response to Audit #01-09. Alyeska's timetable for completion is the end of 2002. Of particular interest is the completion of an Earthquake Emergency Response Plan that gives emphasis to seismic damage assessment and reconnaissance for potential seismic geo-hazards. The exercising of the plan by means of a drill is also of interest.

A review of the performance test data from the Alyeska Earthquake Monitoring System (EMS) test of September 22, 2001 found that:

- All EMS stations are operational; alarm performance was successful; the EMS shuts down the Pipeline when activated by the Medium Level Seismic Alarm if there is no intervention.
- JPO Finding ANC-01-E-008-F/01, which found that the EMS did not generate a post-earthquake inspection checklist for the Valdez Marine Terminal Facilities remains open. However Alyeska has acknowledged the need to correct this deficiency in Alyeska Letter No. 02-18229, agreed to correct the deficiency by June 1, 2002 and in the interim has provided a paper copy of the current checklist to the OCC supervisor and Valdez Engineering Manager.

A review of the "1999 USGS Probabilistic Hazard Maps of Alaska" showed that the work done prior to the construction of the TAPS to identify faults still accurately represents the significant faults that cross TAPS.

A JPO review found the TAPS Fault Crossing Designs to not to be fully explanatory in the documentation of the design. To assure the design was fully documented, JPO requested Alyeska provide clarification and validation of the original fault crossing design. The current status is:

- Alyeska provided a "Fault Crossing Design Assessment Final Report", prepared by Michael Baker Jr., Inc on February 8, 2002. The report takes into account the current pipeline alignment for the Denali, McGinnis Glacier and Donnelly Dome Faults. The report shows that the modeling of the pipe movement in response to maximum fault displacement is consistent with the original design analysis. There were 3 Bents at the Denali Fault where the pipe displaced slightly beyond the limits of the cross beams at the full design temperature. The pipeline currently operates far below the maximum design temperature. Analysis the Denali Fault Crossing has been incorporated into the Above Ground Pipeline Reliability Center Maintenance Analysis.

Alyeska G-100 aerial photos of the pipeline were inspected at the fault zones to insure there was no new construction since pipeline startup in the fault zones. The inspection revealed no new construction has occurred in the Fault Zones since original construction.

The principle conclusions of JPO Assessment ANC-02-E-002, “Stipulation 3.4, Earthquakes and Fault Displacements” related to stipulation 3.4.2.3 was:

- In 2001 JPO confirmed that the position of the pipe at the Denali Fault meets the original Design position requirements. Upon JPO’s request, Alyeska reassessed the original fault crossing designs and provided the report: “Fault Crossing Design Assessment Final Report”, prepared by Michael Baker Jr., Inc on February 8, 2002. The results of this analysis are incorporated into the Above Ground Pipeline Reliability Center Maintenance Study.

Note: On May 8, 2001, the JPO notified Alyeska of special provisions to the Earthquake Monitoring System (JPO Letter No. 01-008-DG). The following clarification and special provisions were imposed on Alyeska:

1. Alyeska will maintain a network of ground-motion detectors capable of continuously monitoring, recording, and instantaneously signaling the occurrence of ground motion (acceleration) in the vicinity of the pipeline reaching a level of Design Operating Earthquake (DOE). Ground motions for a DOE is defined as one-half the intensity of a Design Contingency Earthquake (DCE). The DCE for each seismic zone is defined in stipulation 3.4.1.1.
2. The EMS shall initiate a programmed shutdown of the pipeline when DOE ground motion is reached but is not required for ground motion less than 0.10g. The programmed shutdown shall include the idling of all Pump Stations. The EMS shall alert the pipeline controller by issuing a seismic alarm, when the DOE ground motion level is reached and initiate an automatic pipeline shutdown in ten minutes. Provided all monitoring instrumentation shows the pipeline is functioning properly and no indication of a possible leak has been received, the pipeline controller may intervene to allow operation of the pipeline to continue. The pipeline control system shall provide for automatic shutdown of the pipeline if the pipeline controller fails to acknowledge a seismic alarm within ten minutes.
3. If the leak detection system indicates a possible leak, The Operations Control Center shall initiate a shutdown and close all remote gate valves that will isolate appropriate pipeline segments containing a possible leak. The valves shall be closed in a manner to minimize oil spill volume and to insure the safety and integrity of the pipeline. The appropriate segments include those indicated by the leak alarm and those identified by the EMS as experiencing ground motion at or above the DOE level.
4. The EMS shall determine the segments of the pipeline experiencing ground motion at or above the DOE level and generate a list of those potentially affected features of the pipeline. A prompt close inspection of the pipeline shall occur guided by this list.

Note: As of March 16, 2001 this standard has been revised by the Joint Pipeline Office: Alyeska is authorized to discontinue annual surveillance of the above ground pipe at each

of the identified faults and maintain the position of the pipe on the beams to assure design limits of movement are attainable (JPO Letter No. 01-010-DG).

STIPULATION 3.5. SLOPE STABILITY

Stipulation 3.5.1. Areas subject to mud flows, landslides, avalanches, rock falls and other types of mass soil movements shall be avoided where practicable in locating the Pipeline on State Land. Where such avoidance is not practicable, the Pipeline design, based upon detailed field investigations and analysis, shall provide measures to prevent the occurrence of, or protect the Pipeline against, the effects of such mass movements.

Scope

This stipulation applies during all phases of TAPS.

Summary

This stipulation specifies that the location of the pipeline shall avoid areas subject to mud flows, landslides, avalanches, rock falls and other types of mass soil movements. Where not practicable, the Lessees shall provide measures to prevent the occurrence of, or protect the pipeline against, the effects of such mass movements.

Compliance

There are no compliance issues related to stipulation 3.5. JPO Assessment ANC-01-A-013 summarizes JPO activities associated with stipulation 3.5. The JPO CMP database references 29 oversight reports (26 surveillances, one technical report and two assessments) related to stipulation 3.5. A total of 176 attributes were examined. There were eight compliance findings associated with this stipulation, all of which have been closed.

The 2001 JPO Assessment (No. ANC-01-A-013), “Stipulation 3.5: Slope Stability” evaluated TAPS slopes at the following milepost locations: 175, 296, 351, 353, 379, 389, 392, 406, 407, 418, 441, 489, 596, 622, 686, 687, 698, 712, 717, 744, 755, 759, 771, 775, 776, and 779. The assessment is based on data provided by Alyeska in response to JPO surveillances, orders, and information requests.

JPO published an assessment of slope stability (98-A-011) in which several surveillance level findings (98-GS-005-F/01, 98-GS-008-F/01, 98-GS-006-F/01, and 98-GS-007-F/01) were reduced to two findings; (98-GS-007-F/01 and 98-A-011-F/01). JPO later issued Order No.1 requiring corrective maintenance on the Squirrel Creek slopes (99-063-JH). Finding (98-GS-007-F/01) pertaining to slope stability on the Pump Station 11 Hill has since been closed as a result of corrective action taken by Alyeska with a risk assessment and a JPO approved design basis waiver. Finding 98-A-011-F/01 and JPO Order No 1 (99-063-JH) were closed by Alyeska’s corrective action (00-012-WT).

All unsatisfactory conditions and findings documented in the CMP database related to stipulation 3.5 have been closed. No new findings were identified in the 2001 Slope Stability Assessment.

STIPULATION 3.6. STREAM AND FLOOD PLAIN CROSSINGS AND EROSION

Stipulation 3.6.1. General

Stipulation 3.6.1.1. For each region through which the Pipeline passes, the Pipeline shall be designed to withstand or accommodate the effects (including runoff, stream and flood plain erosion, meander cutoffs, lateral migration, ice-jams, and icings) of those meteorologic, hydrologic (including surface and subsurface) and hydraulic conditions considered reasonably possible for the region. The following standards shall apply to such Pipeline design:

Stipulation 3.6.1.1.1. For stream crossings and portions of the Pipeline within the flood plain:

Stipulation 3.6.1.1.1.1. The Pipeline shall cross streams underground unless a different means of crossing is approved in writing by the Pipeline Coordinator.

Stipulation 3.6.1.1.1.2. The design flood shall be based on the concept of the "Standard Project Flood" as defined in Corps of Engineers Bulletin 52-8, Part 1.

Stipulation 3.6.1.1.1.3. The depth of channel scour shall be established by appropriate field investigations and theoretical calculations using those combinations of water velocity and depth that yield the maximum value. At the point of maximum scour, the cover over the pipe shall be at least twenty (20) percent of the computed scour, but not less than four (4) feet unless a cover of lesser depth is approved in writing by the Pipeline Coordinator.

Stipulation 3.6.1.1.1.4. For overhead crossings comparable analysis shall be made to ensure that support structures are adequately protected from the effects of scour, channel migration, undercutting, ice forces and degradation of permafrost.

Stipulation 3.6.1.1.1.5. In flood plains, appropriate construction procedures shall be used wherever there is potential channelization along the pipe.

Stipulation 3.6.1.1.1.6. The pipe trench excavation shall stop an adequate distance from the water crossing to leave a protective plug (unexcavated material) at each bank. These plugs shall be left in place until the stream bed excavation is complete and the pipe laying operation is begun. The plugs shall not be completely removed until absolutely necessary. The trench shall be backfilled with stable material as soon as the pipe is laid.

Stipulation 3.6.1.2. Culverts and Bridges

Stipulation 3.6.1.2.1. Culverts and bridges necessary for maintenance of the Pipeline shall be designed to accommodate a fifty (50)-year flood in accordance with criteria

established by the American Association of State Highway Officials and the Federal Highway Administration and endorsed by the State of Alaska Department of Highways.

Stipulation 3.6.2. Erosion

Stipulation 3.6.2.1. Where necessary because of outfall erosion, stilling basins shall be constructed at the outflow end of culverts. To prevent erosion the pool sides shall be stabilized by appropriate methods; e.g., by the use of riprap.

Stipulation 3.6.2.2. Slopes of cuts through stream banks shall be designed and constructed to minimize erosion and prevent slides.

Stipulation 3.6.2.3. Erosion control procedures shall accommodate and be based on the runoff produced by the maximum rainfall rate and snow melt rate combination reasonably characteristic of the region. The procedures shall also accommodate effects that result from thawing produced by flowing or ponded water on permafrost terrain.

Scope

This stipulation applies to the design of the pipeline at stream crossings and within floodplains, the design of support structures for the main line pipe's overhead crossings of streams and support structures in floodplains, the construction procedures incorporated in the design for the pipeline within floodplains, all TAPS erosion control procedures, the construction procedures at stream crossings where the main line pipe crosses rivers and streams underground, the design of pipeline culverts and bridges necessary for access to accomplish maintenance. In addition, pipeline bridges that support the mainline pipe must be designed to accommodate the Standard Project Flood.

Summary

This stipulation is to ensure that the pipeline system is designed and constructed to be resistant to erosion and sedimentation and is designed to withstand the effects of hydrologic conditions. The stipulation also requires the pipeline have certain technical design characteristics and that the methods be approved by the State Pipeline Coordinator. It also requires that bridges and culverts be able to accommodate a 50-year flood.

Compliance

There are no compliance issues related to stipulation 3.6. JPO Technical Report FBU-02-E-003 summarizes JPO activities associated with stipulation 3.6. The JPO CMP database references 52 oversight reports (48 surveillances and four technical report) related to stipulation 3.6. A total of 173 attributes were examined. There were no compliance findings associated with this stipulation.

Technical Report FBU-02-E-003 evaluated Alyeska construction, maintenance and operation activities on TAPS and provides documentation that Alyeska is meeting the requirements of the lease as they relate to stipulation 3.6, Stream and Flood Plain Crossings and Erosion. The report noted:

- The State Pipeline Coordinator approved the original design placement of pipeline under streams and exceptions to that practice.
- The Corps of Engineers current manual numbering system references Bulletin 52.8, written in 1965, as Engineering Manual 1110-2-1411. The “Standard Project Flood” is more concisely defined in the Corps Engineering Manual 1110-2-1417, issued in 1994, as “the flood that can be expected from the most severe combination of meteorological and hydrologic conditions that are considered reasonably characteristic of the region in which the study basin is located.
- The pipeline was designed for the standard project flood as detailed in the original Design Basis. The pipeline was constructed to approved final design associated with the Notices to Proceed for each construction segment. Culverts are located in access roads, river training structures, and the workpad. During the past 23 years, the pipeline has been maintained and remedial work performed whenever erosion occurred at culvert outlets. The existing culverts were approved during construction and have been maintained to design standards. Because culverts can increase water velocities due to grade changes from natural streams, stilling basins may be required to dissipate energy and reduce water velocities to prevent erosion of native material. Stabilization of the pool using course material and rock may also be required. The decision to construct stilling basins will be dependent on the presence of fish and requirements necessary to ensure free and safe passage.

Alyeska’s monitoring of the river and floodplains crossings along TAPS, is accomplished through implementation of the MP-166 River and Floodplain Monitoring program. JPO conducts periodic field surveillances coupled with review of these annual MP-166 reports.

From Prudhoe Bay to the Port of Valdez, TAPS crosses a large number of rivers and streams. Pursuant to stipulations 3.6.1.1.1.1 – 3.6.1.1.6, the pipeline was designed to ensure integrity of the pipeline under all possible flow conditions within a diversity of river types and to minimize disturbances to the environment resulting from construction and operation of the pipeline. Design criteria were established for all anticipated conditions and a field program conducted in 1973 further refined the criteria. A summary of design criteria and historical documentation for these “crossings” is summarized in JPO report JPO-99-E-018 titled *Summary Report on the River/Floodplain Crossings of the Trans-Alaska Pipeline System (TAPS)*, August 27, 1999.

The most significant issue regarding this stipulation was JPO’s inability to track Alyeska’s corrective action process. Alyeska System Integrity team engineers would identify situations requiring corrective action and these issues would be referred to Alyeska asset managers but there would be no formal link to budgeting or a timetable for the fix. This issue was specifically associated with Alyeska’s annual River and Floodplain Surveillance Program. Finding JPO-99-S-066-F/01, issued under stipulation 2.4 and transferred to stipulation 1.18.1, addressed this issue. This finding was closed.

STIPULATION 3.7. SEA WAVES

Stipulation 3.7.1. Oil transfer facilities at the Valdez Terminal shall be protected by cut-off devices designed and located to prevent major Oil leakage from breaking of pipes by destructive sea waves comparable to those generated in Port Valdez by the March 27, 1964 earthquake. Design for such protection features shall be submitted in accordance with Stipulation 1.7.

Scope

This stipulation applies to oil transfer facilities at the Valdez Marine Terminal (VMT) that could be impacted by sea waves comparable to the one generated by the March 27, 1964 earthquake. By letter of July 19, 2000, the State Pipeline Coordinator approved a Design Basis (DB-180, Sec. 5.11.2.10) that determined a sea wave run-up area extending up to 30 feet above the mean lower low water level. It applies during all phases of TAPS.

Summary

This stipulation requires that Lessees protect oil transfer facilities at the Valdez Terminal by cut-off devices designed and located to prevent major oil leakage from breaking of pipes by destructive sea waves comparable to those generated in Port Valdez by the March 27, 1964 earthquake.

Compliance

There are no compliance issues related to stipulation 3.7. JPO Assessment VMT-01-A-001 summarizes JPO activities associated with stipulation 3.7. The JPO CMP database references 5 oversight reports (four surveillances and one assessment) related to stipulation 3.7. A total of 34 attributes were examined. There were no compliance findings associated with this stipulation.

Stipulation 3.7 requires specific oil carrying systems to include cut-off devices (valves) that will prevent major environmental pollution from seismic event causing a tsunami run-up. The 1964 earthquake and resulting tsunami were used to identify those facilities subject to stipulation 3.7 requirements. In 2001, the JPO conducted an evaluation of Alyeska compliance to the requirements of stipulation 3.7. The results are reported in JPO Assessment No. VMT-01-A-001 titled "*Stipulation 3.7: Sea Waves*". The purpose of the assessment was to evaluate the valves in specific VMT "oil transfer facilities" (oil-carrying pipes), to insure that the valves are operable and can be closed to prevent major oil pollution. The assessment concluded that Alyeska has a record of recent testing, which document that the valves are functional.

STIPULATION 3.8. GLACIER SURGES

Stipulation 3.8.1. Surveillance systems sufficient to give adequate warning of impending surges on any glacier that could damage the Pipeline shall be instituted prior to transmission of Oil through the pipe. Procedures for initiation and operation of such surveillance systems and protective procedures in the event of such surges shall be submitted in accordance with Stipulation 1.7.

Scope

This stipulation applies during all phases of TAPS.

Summary

This stipulation requires Alyeska to install surveillance systems to provide adequate warning of impending glacier surges that could potentially damage the pipeline system. Procedures to initiate and operate these surveillance systems and protective procedures in the event of surges will be submitted in accordance with Stipulation 1.7.

Compliance

There are no compliance issues related to stipulation 3.8. JPO Technical Report FBU-01-E-009, Revision 1 summarizes JPO activities associated with stipulation 3.8. The JPO CMP database references 5 oversight reports (three surveillances, one technical report and one assessment) related to stipulation 3.8. A total of 14 attributes were examined. There were no compliance findings associated with this stipulation.

In December 2001, the JPO evaluated Alyeska's programs and activities as they relate to this stipulation (FBU-01-E-009, Revision 1 and FBU-S-01-033). Prior JPO evaluations included a CMP report: *Evaluation of APSC Operations of TAPS*, February 1999; which relied upon 1997 Assessment Report (97-A-018, Dec. 23, 1997); and Surveillance report (JPO-97-GS-043).

Note: The JPO imposed special provisions regarding stipulation 3.8 under the authority of stipulation 1.3.2 (JPO Letter No. 01-011-DG). The following procedures for monitoring Black Rapids, Castner, Fels, Canwell, and Worthington Glaciers to detect glacier surges and preparing to implement contingency plans should a glacier encroach on the pipeline are required.

1. Prepare a generic contingency plan for glacier surges. The Alyeska risk assessment recommended a contingency plan be prepared for the Black Rapids and Canwell Glaciers. The JPO supports this recommendation.
2. Aerial photos of the five glaciers shall be taken and analyzed on a five-year cycle. The rate of movement of each glacier is estimated by comparing the terminus location in successive aerial photographs. The next photos are due in 2004. The evaluation reports will be transmitted to the JPO.
3. Aerial photographs shall be taken and analyzed once per year for glaciers that are estimated to reach the pipeline within five years.
4. Provide semi-monthly surveillance of Black Rapids and Canwell Glaciers to assure glacier surge does not go undetected.
5. Prepare a contingency plan for a glacier that is expected to reach the pipeline in less than five years.
6. If the movement analysis indicates a glacier is likely to threaten the pipeline in less than two years, a conceptual engineering study shall be completed and measures executed to protect or relocate the pipeline facilities threatened.

On May 31, 2001 Alyeska informed JPO (Government Letter No. 01-17204) of its actions to comply with the two immediate requirements:

1. Alyeska prepared and sent JPO a draft generic contingency plan that they will use when evidence indicates that any glacier could reach TAPS within two years. In April 2002, the plan will be added to the Alyeska System Integrity Monitoring Procedure (MP-166-2.06, Section 5.2.2.C).
2. The aerial photography schedule is contained in Alyeska's System Integrity's Monitoring Procedure (MP-166-2.06, Section 5.2.2.D.2). The first set of photographs were taken in 1999 and the next set is scheduled for procurement in 2004. Analyses of the aerial photographs taken every five years are used to identify trends in glacier movement and needed maintenance. Alyeska also conducts semi-monthly surveillances of Black Rapids and Canwell Glaciers.

Surveillance Report FBU-S-01-033 documents JPO's evaluation of Alyeska's actions and found them to comply with the special requirements.

STIPULATION 3.9. CONSTRUCTION AND OPERATION

Stipulation 3.9.1. All construction, operation, maintenance, and Termination activities in connection with the Pipeline shall be conducted so as to avoid or minimize thermal or other environmental changes and to provide maximum protection to fish and wildlife and their habitat, and people. All working platforms, pads, fills and other surface modifications shall be planned and executed in such a way that any resulting degradation of permafrost will not jeopardize the Pipeline foundations.

Stipulation 3.9.2. Acceptable plans, procedures and quality controls that ensure compliance with Stipulation 3.9.1 shall be submitted in accordance with Stipulation 1.7.

Scope

This stipulation applies to all activities during all phases of TAPS that could have an impact on the environment, including permafrost.

Summary

This stipulation specifies that all construction, operation, maintenance, and termination activities in connection with the pipeline shall be conducted so as to avoid or minimize thermal or other environmental changes and to provide maximum protection to fish and wildlife and their habitat, and people. Lessees plans, procedures and quality controls to ensure compliance must be accomplished pursuant to stipulation 1.7.

Compliance

There are no compliance issues related to stipulation 3.9. JPO Assessment ANC-01-A-012 summarizes JPO activities associated with stipulation 3.9. The JPO CMP database references 44 oversight reports (23 surveillances, 12 technical reports and nine assessments) related to stipulation 3.8. A total of 135 attributes were examined. There were six compliance findings associated with this stipulation, all of which have been closed.

Aboveground Pipe

JPO Assessment ANC-01-A-012 concludes that, based on a review of monitoring and surveillance information, the TAPS Aboveground System is in compliance with lease stipulation 3.9, Construction and Operations, provided recommendations contained in the 2000 MP-166 Aboveground Monitoring Maintenance Report are executed in conformance with JPO letters (01-110-DG, 01-157-DG), and Alyeska's response (01-17886). The following summarizes areas of scientific debate on this subject:

- (1) Published scientific evidence is available to suggest that warming climatic trends are likely to further warm permafrost by expansion of the active zone, which could further affect pipeline foundations in more than 25,000 VSMs currently subject to movement.
- (2) Eight-four percent of all heat pipes have some degree of blockage thereby diminishing their heat transfer capability.
- (3) Frost heaving represents a potential problem to pipeline foundations under the Construction and Operations Stipulation 3.9, because VSMs are being forced up and out of the ground thereby reducing VSM embedment and ability to resist further frost jacking, and loading. Ground thermal stability is a complex subject. Both natural and man-made factors may be responsible for changes in the permafrost environment of the aboveground pipe support system.
- (4) Aboveground pipe at PS-12 south for one mile is affected by surface drainage, local ponds with thawing soil conditions. This is an aboveground non-slope location that if left uncorrected would be in non-compliance with Grant and Lease Stipulation 3.9, Construction and Operations. The 2000 MP-166 Aboveground Monitoring Maintenance Report contains recommendations addressing this location and others. The effect of JPO letter 01-110-DG and 01-157-DG (attached) will be to ensure appropriate maintenance intervention is conducted within a one-year time frame for correction. Alyeska letter no. 01-17886 indicates several proposed actions including a geo-hazards study of the pipeline.
- (5) An Alyeska/JPO MOU (February 2002) addresses corrective action process issues raised in this report.

Alyeska has responded to these issues with several projects. F170 is designed to determine the performance characteristics of heat pipes, F171 makes aboveground pipe repairs at Squirrel Creek (Project F171), and revise the aboveground surveillance, monitoring and maintenance program linewide. Improvements to the surveillance, monitoring, and maintenance of the aboveground system is anticipated in conjunction with these projects as well as implementation of the 2000 MP-166 Aboveground Monitoring Maintenance Report. More recently, Alyeska letter no. 01-17886 indicates initiation of Phase I of a geo-hazard study, further study of the area 1 mile south of PS 12, and their commitment to RCM analysis and tasks.

Further work on determination of a heat pipe maintenance repair procedure (work order F259) was tested during 2001 on Love road just north of Fairbanks. The essence of this new repair procedure will be to perform a hot tap on the uppermost part of the heat pipe

and insert a small valve to evacuate the hydrogen and ammonia gas and to re-inject fresh ammonia. This procedure if successful would allow many of the more inefficient heat pipes to be restored to full effectiveness as designed and is in a condition to withstand additional heat input to soils as a result of global warming or other sources. A final heat pipe project report is under internal review and approval processing in Alyeska.

Belowground Pipe

Conventional bury of approximately 409 miles of the pipeline was designed for burial in competent bedrock, soil naturally devoid of permafrost, or if frozen of thaw stable sand and gravel. The depth of soil cover over the mainline pipe varies from 3 to 40 feet. Thaw stable ground remains stable even if the mean annual soil temperature rises above the freezing point. Potential thaw of thaw stable sand and gravel can have no significant effect on pipe support. Thus, the thaw of permafrost in areas of conventional pipe burial can have no significant effect on the support of the buried pipe. Consequently, the thaw of permafrost in areas of mainline conventional bury can have no compliance effect relative to technical stipulation 3.9 of the state lease.

Special bury pipe is designed for buried pipe in thaw unstable soil conditions which are maintained in a frozen state either by mechanical refrigeration or by insulation and the use of free standing heat pipes which remove heat from the ground during the winter season. Technical stipulation 3.9 applies to special bury pipe.

The buried pipe system is monitored with the use of smart pigs to identify any changes in pipe shape or movement of the pipe. Both the mechanical refrigeration units and the free standing heat pipes have sufficient excess capacity to accommodate potential soil warming due to climate change and maintain soil conditions in a frozen state surrounding the mainline pipe. Monitoring of the special bury pipe areas provides sufficient early warning of environmental changes to allow both the JPO and the operator sufficient time to perform appropriate corrective maintenance as necessary. Thermal changes in a soil environment tend to occur slowly over time which allows for detection by current monitoring methods for the mainline pipe and pump station facilities. Technical stipulation 3.9 also applies to some pump station refrigerated foundations. The 1999 Operations CMP Report summarizes status of the mainline pipe at the Salcha River and Mainline Refrigeration Unit #2.

STIPULATION 3.10. PIPELINE CORROSION

Stipulation 3.10.1. Lessees shall provide detailed plans for corrosion resistant design and methods for early detection of corrosion. These shall include: (1) pipe material and welding techniques to be used and information on their particular suitability for the environment involved; (2) details on the external pipe protection to be provided (coating, wrapping, etc.), including information on variation of the coating process to cope with variations in environmental factors along the Pipeline route; (3) plans for cathodic protection including details of impressed ground sources and controls to ensure continuous maintenance of adequate protection over the entire surface of the pipe; (4) details of plans for monitoring cathodic protection current including spacing of current

monitors; (5) provision for periodic intensive surveys of trouble spots, regular preventive maintenance surveys and special provisions for abnormal potential patterns resulting from the crossing of the Pipeline by other pipelines or cables; and (6) information on precautions to be taken to prevent internal corrosion of the Pipeline. Lessees shall also provide for periodic internal pitting surveys by electromagnetic or other means.

Scope

This stipulation applies during all of TAPS.

Summary

This stipulation requires the Lessee to provide detailed plans for a corrosion resistant design and methods for early detection of corrosion. Specific criteria to meet these requirements are outlined.

Compliance

There are no compliance issues related to stipulation 3.10. The JPO CMP database references 54 oversight reports (31 surveillances, 21 technical reports and two assessments) related to stipulation 3.10. A total of 268 attributes were examined. There were five compliance findings associated with this stipulation, all of which have been closed.

JPO Technical Engineering Report No. 00-E-021, titled “TAPS Corrosion and Control and Monitoring History” provides a complete history of TAPS corrosion and corrosion monitoring efforts. A brief overview of the report is necessary to establish the basis of JPO compliance monitoring with respect to stipulation 3.10.

In November 1990, the three members of the JPO Corrosion Task Force (DOT/OPS, DOI/BLM, and the State of Alaska) signed an agreement to begin a comprehensive investigation of TAPS corrosion.

In March 1992, the State of Alaska signed an Alternative Dispute Resolution Agreement (Cooperative Agreement) with Alyeska that was approved by FERC and the Alaska Public Utilities Commission. The Cooperative Agreement was intended to develop programs for enhanced detection, mitigation, repair, and prevention of corrosion on TAPS. Agency participation by members of the Task Force included DOI/BLM and the State of Alaska. Technical discussions included DOT/OPS representation.

In November 1992, the JPO Corrosion Task Force issued a report critical of Cathodic Protection (CP) Monitoring methods used and required Alyeska to take corrective action. The Task Force concluded that Alyeska’s CP monitoring procedures were not consistent with industry standards. This report contained two critical conclusions:

1. Alyeska monitors the TAPS CP system using, annual close-interval surveys of pipe-to-soil potentials. Alyeska’s pipe-to-soil data is invalid and its monitoring techniques are inconsistent with the National Association of Corrosion Engineers (NACE) recommended practices.

2. The presence of conditions possibly causing shielding, such as disbonded coating or a large diameter pipe masking its bottom quadrant does not exempt Alyeska from implementing technically sound CP monitoring procedures consistent with the NACE standard.

Alyeska was “directed” to submit schedules and plans intended to satisfy five recommendations contained within the Report. The recommendations were summarized as follows:

1. Alyeska must develop a valid monitoring method for obtaining CP data.
2. Alyeska must ensure that monitoring facilities are adequately maintained.
3. Alyeska must upgrade inadequate cathodic protection and repair any corroded pipe as soon as practical after discovery.
4. Alyeska must confirm that disbonded coating or the large diameter of TAPS does not shield CP current.
5. Alyeska shall continue to develop state of the art mathematical modeling techniques to predict the likelihood corrosion.

In 1994, Alyeska introduced the CP Coupon and proposed the use of this technology as a stand-alone CP Monitoring Method. In March 1996, the “CP Coupon Agreement” was reached by Alyeska and JPO that conditionally recognized CP Coupon Technology as a valid method of monitoring the adequacy of CP on TAPS. The Agreement did not approve the methodology of CP coupon monitoring of TAPS.

Laboratory and field testing was conducted between 1996 and 1998 to resolve the technical issues related to the development of CP Coupons as a stand-alone monitoring methodology, and final closure of the corrective action requirements contained in the 1992 JPO Report. In 1998, Alyeska issued its “*1997 TAPS Mainline Cathodic Protection Coupon Monitoring Program Report*” presenting the results of the field and laboratory testing required to resolve the final technical issues.

In March of 1998, JPO approved the use of CP coupon as the “best available” technology for monitoring the CP system on TAPS, but stipulated that they must be used in conjunction with a comprehensive “Corrosion Control Management Plan.” The JPO concluded that “CP Coupons overstate CP levels being afforded to the pipeline and become significant as differences in environmental conditions and exposed pipe wall surface areas increase.” The JPO further stated that “Reliance on CP coupon data and the application of the standard NACE CP Monitoring criteria as a stand-alone method for corrosion protection monitoring on TAPS will most likely result in continuing corrosion problems.”

On May 29, 1998, Alyeska provided a schedule for the development of a Corrosion Control Management Plan and Continued Development Plan. JPO and Alyeska agreed that all CP assessment technologies have limitations. CP coupons represent the best available technique of cathodic protection measurement that eliminates interference from permanently attached sacrificial anodes and telluric currents.

Alyeska acknowledged the limitations of coupons as a stand-alone monitoring methodology. Alyeska proceeded with two significant strategies to address these concerns, 1) the development of a comprehensive Corrosion Control Management Plan, and 2) the placement of additional CP Monitoring Coupons to compensate for changes in environmental condition. Coupons were initially placed at roughly one mile spacing. Coupons have now been in place and monitored for up to six years.

In March of 1999, Alyeska submitted the Corrosion Control Management Plan. The Corrosion Control Management Plan is intended to provide a redundant five-part program of corrosion protection, which is equal to or better than any stand-alone method. In short the five parts are:

1. Data Management Component
2. CP Monitoring Component (Includes Coupons, Close Interval Survey, and Conventional Test Stations)
3. Pipeline Integrity Component: (Uses pig data to find and repair corrosion defects)
4. Enhance CP Component
5. Integrated Monitoring Component: Used to make decisions regarding the need for enhancements to the CP system and pipe refurbishment (Combines Corrosion Pigs, CP Data, Mitigation History, Corrosion Activity Model into a Decision Tree).

On February 23, 2000, the JPO informed Alyeska that upon acceptance of the final Corrosion Control Management Plan procedures, JPO would close all outstanding issues associated with the 1996 agreement and the 1992 report. The Corrosion Control Management Plan and its implementation procedures is currently being used as the compliance standard for 49 CFR part 195.416 and Stipulation 3.10 concerning corrosion monitoring and control for the TAPS mainline.

In June of 2000, Alyeska submitted the finalized Corrosion Control Management Plan procedures along with a Transition Plan for the remaining Cooperative Program CP Projects. The correspondence states that Alyeska has commenced operation of TAPS in accordance with the provisions of the Corrosion Control Management Plan and its implementation procedures.

JPO will therefore use this plan as the basis of compliance with 49 CFR Part 195 and Stipulation 3.10.

The most recent comprehensive analysis of the TAPS corrosion monitoring program is provided in JPO Engineering Report No. JPO-00-E-028 (November 2, 2000) titled "*Trans-Alaska Pipeline System Corrosion Control and Monitoring*". The report concludes that with the current levels of monitoring, corrective action, and continuous improvement, Alyeska is compliant with stipulation 3.10. This conclusion was reiterated in the 1999/2000 JPO CMP Report on the Trans-Alaska Pipeline Maintenance Program.

STIPULATION 3.11. CONTAINMENT OF OIL SPILLS

Stipulation 3.11.1. Lessees shall provide Oil spill containment dikes or other structures around storage tanks at pump stations and at the Valdez Terminal. The volume of the containment structures shall be at least: (1) one hundred ten (110) percent of the total storage volume of the storage tanks in the relevant area, plus (2) a volume sufficient for maximum trapped precipitation and runoff which might be impounded at the time of the spill. Such structures shall be constructed to withstand failure from earthquakes in accordance with Stipulation 3.4 and shall be impervious so as to provide seepage-free storage until disposal of their contents can be effected safely without contamination of the surrounding area.

Stipulation 3.11.2. Lessees shall provide containment dikes or other structures to minimize effects of Oil spill at critical locations along the Pipeline in accordance with Stipulation 2.14.

Scope

This stipulation applies during all phases of TAPS to oil storage tanks at pipeline pump stations and the Valdez Marine Terminal and to critical locations along the pipeline.

Summary

Lessees are required provide oil spill containment structures for storage tanks installed at pump stations and the Valdez terminal. These structures shall:

1. Have a volume of 110% of the storage volume of all the tanks in the relevant area plus sufficient volume for the maximum trapped precipitation and runoff which might be impounded at the time of the spill,
2. Be constructed to be capable of withstanding failure from an earthquake in accordance with stipulation 3.4, and
3. Be impervious to seepage for a period reasonable for discovery and removal of any oil spill without contaminating the surrounding area.

Compliance

The JPO staff includes Liaisons from the Alaska Department of Environmental Conservation (ADEC) and Environmental Protection Agency (EPA). These Liaisons and a JPO/BLM employee form the JPO Oil Spill Team. The State Pipeline Coordinator relies on this Team for technical expertise on issues involving oil spill contingency planning and response activities. ADEC and EPA provided the State Pipeline Coordinator or Authorized Officer with 2001 Compliance Reports that find Alyeska in compliance with relevant state and federal laws (Attachment 2).

There are also no Lease compliance issues related to stipulation 3.11. JPO Assessment ANC-02-A-010 summarizes JPO activities associated with stipulation 3.11. The JPO CMP database references six oversight reports (5 surveillances and one assessment) related to stipulation 3.11. A total of 14 attributes were examined. There were no compliance findings associated with this stipulation.

Secondary containment is required around storage tanks at all pump stations and the Valdez Marine Terminal. The capacity and design requirements of the permanent tank farms at the pump stations and the VMT generally received their design review prior to construction. Since then, Pump Station 1 has constructed additional containment berms and the condition of the secondary containment at all pump stations has been reviewed to ensure compliance with 18 AAC 75.075. The stipulation also addresses additional containment as required by the Oil Spill Contingency Plan. While Alyeska is in the process of planning and constructing berms at or near the pipeline crossings with the Gulkana River, the Tonsina River and the Klutina River, these berms are not required by the C-Plan, and therefore not presently subject to Stipulation 3.11.2.

STIPULATION 4. STATE AUTHORITY

Stipulation 4.1. State Laws, Regulations, Permits and Authorizations

Stipulation 4.1.1. No requirement imposed by these Stipulations shall replace or lessen the applicability of any State law, regulation, permit, or authorization as that law, regulation, permit, or authorization applies or will apply to the construction, operation, maintenance, or Termination of the Pipeline.

Scope

This stipulation applies to all activities during all phases of TAPS.

Summary

State law, regulation, permit, or authorizations shall take precedence over the stipulations in the Lease.

Compliance

Based on the individual agency compliance reports, there are no compliance issues related to stipulation 4.1 (Attachment 2).

DEPARTMENT OF FISH AND GAME REPORT



**ALASKA DEPARTMENT OF FISH AND GAME
JOINT PIPELINE OFFICE**

**Assessment of Compliance with ADF&G Requirements and
Grant of Right-of-Way and Right-of-Way Lease
Stipulation 2.5
Fish and Wildlife Protection**

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**November 2001
Assessment No. ANC-01-A-011**

**411 West Fourth Avenue
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JPO Assessment No. ANC-01-A-011

Assessment of Compliance with ADF&G Requirements and Grant / Lease Stipulation 2.5 Fish and Wildlife Protection

1.0 Purpose

This assessment evaluates Alyeska Pipeline Service Company's (APSC's) compliance with ADF&G requirements and Stipulation 2.5 of the Federal Grant of Right-of-Way and State Lease (Grant/Lease).

2.0 Scope and Methodology

Compliance is determined by reviewing Joint Pipeline Office (JPO) oversight records: reports, assessments and surveillances of APSC's performance from January 1998 to September 2001. Fish Habitat Permits and Notices of Violation issued by the Alaska Department of Fish and Game (ADF&G) and other relevant correspondence were also considered in this assessment.

3.0 Related Requirements

ADF&G Requirements - Alaska Statute (AS) 16 and 5 AAC 95 require that certain activities in rivers and streams supporting resident or anadromous fish receive prior written approval by the ADF&G. Approval is in the form of a Fish Habitat Permit, administered by the department's Habitat and Restoration Division. The authority for these approvals are AS 16.05.840, which ensures that all fish are provided free and efficient upstream and downstream movement in freshwater systems or AS 16.05.870, which protects anadromous fish and their freshwater habitats. Fish Habitat Permits typically contain stipulations designed to avoid or minimize impacts to fish resources and habitats within specified time frames. The ADF&G has the added responsibility to review project proposals under various State and Federal laws including the Alaska Coastal Management Program and the Fish and Wildlife Coordination Act. The ADF&G also reviews oil spill contingency plans pursuant to AS 46.04.030(j).

Grant / Lease Requirements - Stipulation 2.5. Fish and Wildlife Protection (most inclusive language from Lease is used).

Stipulation 2.5.1.1; Passage of Fish - "Permittees/Lessees shall provide for uninterrupted movement and safe passage of fish. Any artificial structure or any stream channel change that would cause a blockage to fish shall be provided with a fish passage structure or facility that meets all Federal and State requirements. The proposed design shall be submitted to the Authorized Officer/Pipeline Coordinator in accordance with stipulation 1.7."

Stipulation 2.5.1.2; Passage of Fish - “Pump intakes shall be screened to prevent harm to fish.”

Stipulation 2.5.1.3; Passage of Fish - “Abandoned water diversion structures shall be plugged and stabilized to prevent trapping or stranding of fish.”

Stipulation 2.5.1.4; Passage of Fish - “If material sites are approved adjacent to or in certain lakes, rivers or streams, the Authorized Officer/Pipeline Coordinator may require Permittees/Lesseees to construct levees, berms or other suitable means to protect fish and fish passage and to prevent siltation of streams or lakes.”

Stipulation 2.5.2.1; Fish Spawning Beds and Fish Rearing Areas - “‘Fish Spawning Beds’ and ‘Fish Rearing Areas’ respectively mean the areas where anadromous and resident fish deposit their eggs and areas required for maintenance and growth of fish.”

Stipulation 2.5.2.2; Fish Spawning Beds and Fish Rearing Areas - “Permittees/Lesseees shall avoid channel changes in Fish Spawning Beds designated by the Authorized Officer/Pipeline Coordinator; however, where channel changes cannot be avoided in such beds or areas, new channels shall be constructed according to written standards supplied by the Authorized Officer/Pipeline Coordinator.”

Stipulation 2.5.2.3; Fish Spawning Beds and Fish Rearing Areas - “Fish Spawning Beds shall be protected from sediment where soil material is expected to be suspended in water as a result of construction activities. Settling basins shall be constructed to intercept silt before it reaches streams or lakes.”

Stipulation 2.5.2.4; Fish Spawning Beds and Fish Rearing Areas - “Permittees/Lesseees shall comply with any special requirements made by the Authorized Officer/Pipeline Coordinator for a stream system in order to protect Fish Spawning Beds and Fish Rearing Areas. Lesseees shall repair all damage to Fish Spawning Beds and Fish Rearing Areas caused by construction, operation, maintenance or termination of the pipeline system.”

Stipulation 2.5.3.1; Zones of Restricted Activities - “Permittees/Lesseees activities in connection with the Pipeline System in key fish and wildlife areas on State Land may be restricted by the Authorized Officer/Pipeline Coordinator during periods of fish and wildlife breeding, nesting, spawning, lambing or calving activity and during major migrations of fish and wildlife. The Authorized Officer/Pipeline Coordinator shall give Permittees/Lesseees written notice of such restrictive action. From time to time, the Authorized Officer/Pipeline Coordinator shall furnish Permittees/Lesseees a list of areas where such actions may be required, together with anticipated dates of restriction.”

Stipulation 2.5.4.1; Big Game Movements - “Permittees/Lesseees shall construct and maintain the Pipeline, both buried and above ground sections, so as to assure free passage and movement of big game animals.”

4.0 Background

Passage of Fish has been the subject of numerous permits issued since Trans-Alaska Pipeline System (TAPS) construction. The TAPS Right-of-Way (ROW) is eight hundred miles long and there are 154 access roads associated with TAPS. It crosses over 800 different rivers and streams. Many of these rivers and streams have multiple crossing locations. There are about 1,800 low water crossings and 4,500 culverts in the streams traversed by TAPS. Many of these streams support anadromous and resident fish.

To maintain viable and healthy fish populations and to comply with Alaska State law and Grant/Lease stipulations, fish in all life stages must be able to freely and efficiently migrate up and down waterways. Fish migrations in these water bodies involve completing one or more cycles of upstream and downstream movements. Fish migrations may occur during all or just part of the year depending on the fish species, life stage, location, and the type of migration. Fish migrate to spawn, to feed, and to seek refuge from predators or adverse environmental conditions, such as the complete winter freeze-up of a stream, slough, or pond. Mature adult fish must be able to reach spawning grounds with minimal delay. Since anadromous fish typically cease feeding when they enter freshwater to spawn, migration delays can seriously deplete stored energy reserves and impact reproductive success. For juvenile fish, delays in reaching feeding areas, over-wintering habitat, or predator relief areas may affect growth and survival. Ensuring that fish can pass freely through stream corridors to important habitat areas is essential to maintaining fish production. Evaluation of low water crossings and culverts for compliance with ADF&G permit conditions and requirements provide an indication of compliance with related Grant/Lease stipulations.

Fish Spawning Beds and Fish Rearing Areas are considered sensitive areas because they are critical to the continued propagation of fish. Critical life stages for fish can be during over-wintering, spawning, rearing or incubation.

Adult salmon spawning typically begins in mid-July and extends through the fall. The eggs deposited in the streambed do not emerge as free swimming fish until April or May of the following year. Salmon eggs deposited in streambed gravel are extremely vulnerable to any type of disturbance such as driving over them with vehicles or heavy equipment because they cannot withstand shock and pressure. In addition, sediment deposited on top of salmon spawning sites may suffocate and thereby kill eggs or fish fry. For these reasons, the instream use of equipment is prohibited in salmon spawning and rearing areas until fry emergence is complete or over sufficient ice cover when salmon eggs and fry are least vulnerable to disturbance.

ADF&G permit conditions and requirements, pursuant to AS 16.05.870, and the applicable Grant/Lease stipulations are designed to protect fish during their critical life stages such as over-wintering, spawning, rearing or incubation.

Zones of Restricted Activity created and implemented under Stipulation 2.5.3.1 in the Grant/Lease restricts activities at all fish stream crossings of the pipeline and its facilities.

Zones of Restricted Activity are designed to protect fish and wildlife breeding, nesting, spawning, and migration periods.

Big Game Movements occur along the length of TAPS. In response to big game movements, the pipeline has been designed with features (e.g. height constraints on elevated sections, buried animal crossings, and raised-pipe animal crossings) to provide opportunities for free passage and movement by terrestrial mammals.

5.0 Findings (Tables 1 and 2).

Table 1. CMP database records of unsatisfactory conditions associated with Grant/Lease Stipulation 2.5

No.	UNSAT Condition	Source Document / Finding	CMP Database: Stipulation/Condition/Description	Current Status / Finding
1	<u>Dietrich River</u> : Failure to complete required revegetation placed APSC in noncompliance with seeding and planting requirements. (Paul Dumlevy)	JPO-00-S-022, 10/17/99. Finding 1 in APSC 1999 Flood Damage Repair Project (F075) Assessment No. JPO-00-A-004, 7/8/00.	2.05.02 / UNSAT / Verify that construction activities are conducted so as to provide maximum protection to fish and wildlife and their habitat, and from erosion, as indicated below. Site revegetation and fish habitat restoration work are considered and documented for in a restoration plan, to be submitted by 1/15/00.	CLOSED based upon surveillance JPO-00-S-035, 7/8/00 and by JPO Letter No. 00-059-JH, 9/7/00
2	<u>LWC at PLMP 1.61</u> : had a scoured bed and banks. (Paul Dumlevy and Pat Jarrett)	JPO-98-GS-030, 7/21/98	2.05 / UNSAT / Verify that no damage has been done to channel bottoms or banks through removal of material by water flow (scouring).	CLOSED based upon Assessment JPO-01-A-011. Rationale: The LWC drainage system at PLMP 1.61 is not on the Fish Stream List.

No.	UNSAT Condition	Source Document / Finding	CMP Database: Stipulation/Condition/Description	Current Status / Finding
3	<u>LWC at Station # 445 + 90:</u> had ponding in the center. (Paul Dunlevy and Pat Jarrett)	JPO-98-GS-030, 7/21/98	2.05 / UNSAT / The stream gradient (low point in the LWC) is at the same depth as the stream being crossed.	CLOSED based upon Assessment JPO-01-A-011. Rationale: The LWC drainage system at Station # 445 + 90 is not on the Fish Stream List.
4	<u>LWC at Station # 445 + 90:</u> had ponding in the center. (Paul Dunlevy and Pat Jarrett)	JPO-98-GS-030, 7/21/98	2.05 / UNSAT / There is no ponding above, in, or below the LWCs, due to incorrect placement, elevation, or movement of the rock or gravel material.	CLOSED based upon Assessment JPO-01-A-011. Rationale: The LWC drainage system at Station # 445 + 90 is not on the Fish Stream List.
5	<u>LWC at Station # 217 + 50:</u> outflow had a "dam" of gravel, preventing flow. (Paul Dunlevy and Pat Jarrett)	JPO-98-GS-030, 7/21/98	2.05 / UNSAT / There is no damming in or below the LWC, due to incorrect placement, elevation, or movement of the gravel materials.	CLOSED based upon Assessment JPO-01-A-011. Rationale: The LWC drainage system at Station # 217 + 50 is not on the Fish Stream List.
6	<u>Feeding Wildlife:</u> Three baseline crew members were observed feeding bread to ground squirrels. (Phil Brna)	JPO-98-S-117, 8/17/98	2.05 / UNSAT / Observation of crew members feeding wildlife.	CLOSED based upon Assessment JPO-01-A-011. Rationale: Feeding wildlife is not a Stipulation 2.5 compliance issue, but rather a violation of Alyeska policy.

No.	UNSAT Condition	Source Document / Finding	CMP Database: Stipulation/Condition/Description	Current Status / Finding
7	130 APL/AMS 5; PLMP 42.2: Stream flows are going subsurface through gravel washed out of the LWC crossing. (Phil Brna)	JPO-98-S-117, 8/17/98	2.05 / UNSAT / Stream flows are going subsurface through gravel washed out of the LWC crossing.	CLOSED based upon permit FG 01-SPO-075 and Assessment JPO-01-A-011. Channel was promptly cleared on 8/25/98 (e-mail).
8	Gustafson Gulch PLMP 96.1: The LWC is badly rutted and will block fish passage as soon as the water drops a few more inches. (Phil Brna)	JPO-98-S-117, 8/17/98	<i>2.05 / UNSAT / The LWC is badly rutted and will block fish passage as soon as the water drops a few more inches.</i>	CLOSED based upon 9/10/98 Memorandum and Assessment JPO-01-A-011. Channel was promptly fixed on 8/26/98 (e-mail).
9	Poison Pipe Cr; PLMP 100: The LWC needs maintenance work to prevent a fish passage problem as water drops. (Phil Brna)	JPO-98-S-117, 8/17/98	<i>2.05 / UNSAT / The LWC needs maintenance work to prevent a fish passage problem as water drops.</i>	CLOSED based upon 9/10/98 Memorandum and Assessment JPO-01-A-011. Channel was promptly fixed on 8/26/98 (e-mail).
10	PS 3 Access Road Culvert: The culvert invert on the upstream end is significantly perched and downstream the FGL is exposed. (Phil Brna)	JPO-98-S-117, 8/17/98; and Notice of Violation, 2/5/99. Finding 1 in Assessment No. JPO-00-A-001, February 2000.	<i>2.05 / UNSAT / The culvert invert on the upstream end is significantly perched and downstream the FGL is exposed.</i>	CLOSED based upon 8/11/99 site inspection of the new culvert installation at 120-APS/AMS-3 and Assessment JPO-00-A-001.
11	Camp Terry Creek: LWC received flood repair work that did not comply with several stipulations of the Fish Habitat Permit. (Mike Thompson)	FG 99-SPO-007, 2/19/99 JPO-00-S-036, 7/27/00 Notice of Violation, 7/31/00	2.05 / UNSAT / Verify that, for activities that potentially impact fish, fish habitat, or open channels, the activities are approved prior to starting and do not harm fish. (Stips. 2.5.1.1 and 2.5.1.2; and EN-43)	CLOSED based upon surveillance JPO-00-S-095, 9/12/00.

No.	UNSAT Condition	Source Document / Finding	CMP Database: Stipulation/Condition/Description	Current Status / Finding
12	<u>Phelan Creek</u> : The ADF&G permit did not authorize the construction of a bridge in the creek's open channel. Three wooden beams were placed in the water to support the bridge materials. (Paul Dunlevy)	JPO-99-S-003, 2/23/99 Finding 1 in Assessment No. JPO-00-A-001, February 2000.	2.05 / UNSAT / Verify that, for activities that potentially impact fish, fish habitat, or open channels: any project activities, which could cause a blockage to fish, shall meet regulations and be approved prior to construction. (Stip. 2.5.1.1)	CLOSED / Recommend Change to COTS Rationale: The contractor removed the beams after JPO pointed out ADF&G requirements and unauthorized placement.
13	<u>Alignment Slough</u> : Material was deposited in a fish stream without approval. (Phil Bma)	JPO-99-S-010, 4/26/99 Finding 2 in APSC 1999 Flood Damage Repair Project (F075) Assessment No. JPO-00-A-004, 7/8/00	2.05 / UNSAT / Alignment Slough, a stream which supports resident Arctic grayling, was crossed in a manner which maintains fish passage when water is present. (FG 99-SPO-002)	CLOSED based upon Assessment No. JPO-00-A-004, 7/8/00 and by JPO Letter No. 00-059-JH, 9/7/00
14	<u>LWCs</u> : at PLMP 790.9, 790.5, 791.2 and 791.3 were not properly maintained and could impede fish passage. (Phil Bma)	JPO-99-S-062, 6/21/99 Finding 1 in Assessment No. JPO-00-A-001, February 2000.	2.05 / UNSAT / LWCs shall be constructed to match the existing stream geometry (width and depth) as closely as possible. The bottom profile shall be V-notched or sufficiently narrow at the thalweg (deepest part of the stream channel) to confine the water to a depth that will ensure fish passage during low flows. (Fish Habitat Permit FG 94-SPO-005).	CLOSED based upon surveillance JPO-00-S-109, 10/12/99.
15	<u>LWCs</u> : at PLMP 790.9, 790.5, 791.2 and 791.3 lacked maintenance and resulted in degraded fish habitat. (Phil Bma)	JPO-99-S-062, 6/21/99 Finding 1 in Assessment No. JPO-00-A-001, February 2000.	2.05 / UNSAT / The installation and maintenance of LWCs shall be conducted in a manner that maintains fish and their habitats. (Fish Habitat Permit FG 94-SPO-005).	CLOSED based upon surveillance JPO-00-S-109, 10/12/99.
16	<u>LWCs</u> : at PLMP 790.9, 790.5, 791.2 and 791.3 were originally installed to comply with this condition but that	JPO-99-S-062, 6/21/99 Finding 1 in Assessment No. JPO-00-A-001, February 2000.	2.05 / UNSAT / The permittee shall survey a representative elevation of the natural stream channel (the thalweg or deepest portion of the channel) and	CLOSED based upon surveillance JPO-00-S-109, 10/12/99.

No.	UNSAT Condition	Source Document / Finding	CMP Database: Stipulation/Condition/Description	Current Status / Finding
	with this condition but they have not been properly maintained. The bottom grade of 4 LWCs appears to exceed the thalweg of the streams. (Phil Bma)		deepest portion of the channel) both upstream and downstream, and shall use this information to determine the natural grade of the stream. The LWC shall be installed so that the natural grade is not exceeded at the top surface of material placed at the bottom of the crossing. (Fish Habitat Permit FG 94-SPO-005).	
17	<u>LWCs</u> : at PLMP 790.9, 790.5, 791.2 and 791.3 were not properly maintained to accommodate the efficient passage and movement of fish. (Phil Bma)	JPO-99-S-062, 6/21/99 Finding 1 in Assessment No. JPO-00-A-001, February 2000.	2.05 / UNSAT / The LWCs shall be designed, installed and maintained to accommodate the efficient passage and movement of fish, both upstream and downstream. (Fish Habitat Permit FG 94-SPO-005)	CLOSED based upon surveillance JPO-00-S-109, 10/12/99.
18	<u>LWCs</u> : at PLMP 790.9, 790.5, 791.2 and 791.3 were rutted. LWCs were originally installed to comply with this condition but were not properly maintained. (Phil Bma)	JPO-99-S-062, 6/21/99 Finding 1 in Assessment No. JPO-00-A-001, February 2000.	2.05 / UNSAT / Only material which resists rutting, prevents erosion and downstream sedimentation, and precludes "French-draining" shall be placed in LWCs. (Fish Habitat Permit FG 94-SPO-005).	CLOSED based upon surveillance JPO-00-S-109, 10/12/99.
19	<u>Grey Stream</u> : had three culverts beneath the driveway. The lowest culvert completely filled with bedload, the middle culvert was perched and the highest culvert was above the stream grade. Water was flowing across the workpad, north of culverts. (Phil Bma)	JPO-99-S-062, 6/21/99 JPO Ltr. No. 99-062-JH, 8/16/99 Finding 1 in Assessment No. JPO-00-A-001, February 2000.	2.05 / UNSAT / Culverts: Lessees shall provide for the uninterrupted movement and safe passage of fish.	CLOSED based upon JPO Letter No. 00-059-MC, 7/26/00.
20	<u>Grey Stream</u> : had three culverts beneath the driveway. The lowest culvert completely	JPO-99-S-062, 6/21/99 JPO Ltr. No. 99-062-JH, 8/16/99	2.05 / UNSAT / Each culvert shall be maintained so that culvert water velocities and flows, and any resulting	CLOSED based upon JPO Letter No. 00-059-MC, 7/26/00.

No.	UNSAT Condition	Source Document / Finding	CMP Database: Stipulation/Condition/Description	Current Status / Finding
	filled with bedload, the middle culvert was perched and the highest culvert was above the stream grade. Water was flowing across the workpad, north of culverts. (Phil Brna)	Finding 1 in Assessment No. JPO-00-A-001, February 2000.	drop in water surface profile at any point within the culvert influence, do not impede the efficient passage of the slowest swimming fish group indigenous to the waterway at a mean annual flood design discharge with a two day duration.	
21	<u>Grey Stream:</u> had three culverts beneath the driveway. The lowest culvert completely filled with bedload, the middle culvert was perched and the highest culvert was above the stream grade. Water was flowing across the workpad, north of culverts. (Phil Brna)	JPO-99-S-062, 6/21/99 JPO Ltr. No. 99-062-JH, 8/16/99 Finding 1 in Assessment No. JPO-00-A-001, February 2000.	2.05 / UNSAT / Each round culvert shall be maintained so that at least one-fifth of the diameter or 18 inches, whichever is less, is buried below the stream thalweg at both the inlet and outlet of the culvert.	CLOSED based upon JPO Letter No. 00-059-MC, 7/26/00.
22	<u>Grey Stream:</u> had three culverts beneath the driveway. The lowest culvert completely filled with bedload, the middle culvert was perched and the highest culvert was above the stream grade. Water was flowing across the workpad, north of culverts. (Phil Brna)	JPO-99-S-062, 6/21/99 JPO Ltr. No. 99-062-JH, 8/16/99 Finding 1 in Assessment No. JPO-00-A-001, February 2000.	2.05 / UNSAT / Each culvert shall be maintained so that the effective slope of the culvert does not exceed 1.0 percent for culverts shorter than 80 feet.	CLOSED based upon JPO Letter No. 00-059-MC, 7/26/00.
23	<u>Eleven Stream Locations:</u> The lack of maintenance at 11 of 19 LWCs resulted in degradation of fish habitat. (Phil Brna)	JPO-99-S-065, 6/23/99 Finding 1 in Assessment No. JPO-00-A-001, February 2000.	2.05 / UNSAT / The installation or maintenance of LWCs shall be conducted in a manner that maintains fish and their habitats (Fish Habitat Permit FG 94-SPO-005). There were 4 SATs, 11 UNSATS, and 4 N/As associated with this attribute and an	CLOSED based upon corrective actions outlined in APSC Ltr. No. 99-14815; LWC repair completed in October 1999; LWC maintenance completed in August 2001; and

No.	UNSAT Condition	Source Document / Finding	CMP Database: Stipulation/Condition/Description	Current Status / Finding
			extensive table.	Assessment JPO-01-A-011
24	<u>Eleven LWCs</u> ; were not properly maintained to accommodate the efficient passage and movement of fish. (Phil Bma)	JPO-99-S-065, 6/23/99 Finding 1 in Assessment No. JPO-00-A-001, February 2000.	2.05 / UNSAT / The LWCs shall be designed, installed and maintained to accommodate the efficient passage and movement of fish, both upstream and downstream. (Fish Habitat Permit FG 94-SPO-005). There were 4 SATs, 11 UNSATs, and 4 N/As associated with this attribute and an extensive table.	CLOSED based upon corrective actions outlined in APSC Ltr. No. 99-14815; LWC repair completed in October 1999; LWC maintenance completed in August 2001; and Assessment JPO-01-A-011
25	<u>Eleven of Nineteen LWCs</u> ; were rutted. LWCs were originally installed to comply with this condition, but were not properly maintained. (Phil Bma)	JPO-99-S-065, 6/23/99 Finding 1 in Assessment No. JPO-00-A-001, February 2000.	2.05 / UNSAT / Only material which resists rutting, prevents erosion and downstream sedimentation, and precludes "French-draining" shall be placed in LWCs. (Fish Habitat Permit FG 94-SPO-005). There were 4 SATs, 11 UNSATs, and 4 N/As associated with this attribute and extensive table.	CLOSED based upon corrective actions outlined in APSC Ltr. No. 99-14815; LWC repair completed in October 1999; LWC maintenance completed in August 2001; and Assessment JPO-01-A-011
26	<u>Eleven of Nineteen LWCs</u> ; were wider and shallower than the existing stream geometry. LWCs were originally installed to comply with this condition, but were not properly maintained. (Phil Bma)	JPO-99-S-065, 6/23/99 Finding 1 in Assessment No. JPO-00-A-001, February 2000.	2.05 / UNSAT / LWCs shall be constructed to match the existing stream geometry (width and depth) as closely as possible. The bottom profile shall be V-notched or sufficiently narrow at the thalweg (deepest part of the stream channel) to confine the water to a depth that will ensure fish passage during low flows. (Fish Habitat Permit FG 94-SPO-005).	CLOSED based upon corrective actions outlined in APSC Ltr. No. 99-14815; LWC repair completed in October 1999; LWC maintenance completed in August 2001; and Assessment JPO-01-A-011
27	<u>Eleven LWCs</u> ; were not properly maintained to accommodate the efficient passage and movement of fish.	JPO-99-S-065, 6/23/99 Finding 1 in Assessment No. JPO-00-A-001, February 2000.	2.05 / UNSAT / The permittee shall survey a representative elevation of the natural stream channel (the thalweg or deepest portion of the channel) both	CLOSED based upon corrective actions outlined in APSC Ltr. No. 99-14815; LWC repair completed in

No.	UNSA T Condition	Source Document / Finding	CMP Database: Stipulation/Condition/Description	Current Status / Finding
	(Paul Brna)		upstream and downstream, and shall use this information to determine the natural grade of the stream. The LWC shall be installed so that the natural grade is not exceeded at the top surface of material placed at the bottom of the crossing. (Fish Habitat Permit FG 94-SPO-005). There were 4 SATs, 11 UNSATS, and 4 N/As associated with this attribute and an extensive table.	October 1999; LWC maintenance completed in August 2001; and Assessment JPO-01-A-011
28	Phelan Creek: The ADF&G permit did not authorize the construction of a bridge in the creek's open channel. Three wooden beams were placed in the water to support the bridge materials. (Paul Dunlevy)	JPO-99-S-005, 2/23/99 (Referenced in JPO-99-S-003) FG 99-SPO-007 Finding 1 in Assessment No. JPO-00-A-001, February 2000.	2.05 / UNSAT / Verify that, for activities that potentially impact fish, fish habitat, or open channels, the activities are approved prior to starting and do not harm fish. (Stips. 2.5.1.1 and 2.5.1.2; and EN-43)	CLOSED / Recommend Change to COTS Rationale: The contractor removed the beams after JPO pointed out ADF&G requirements and the unauthorized placement of bridge materials.

Table 2. Incidents of TAPS Noncompliance with Grant / Lease and State Law Resulting in a Notice of Violation

No.	Incidents of Noncompliance	Source Document / Finding	Notice of Violation: Stipulation/Statute/Description	Current Status / Finding
1	<u>Mark Creek:</u> Failure to maintain the LWC of the creek. (Phil Brna)	Field Inspection, 8/11/99 Notice of Violation, 8/26/99. Finding 1 in Assessment No. JPO-00-A-001, February 2000.	2.5.1.1 / AS 16.05.860 / The LWC did not comply with five ADF&G permit requirements because it had the potential to block or hinder the downstream passage of six species of fish as water levels fluctuated.	CLOSED based upon Assessment No. JPO-00-A-001, February 2000; (photographic evidence provided to JPO from APSC, prior to 10/15/99).
2	<u>125-APL-4 Access Road:</u> LWC was reconstructed without approval and did not meet five ADF&G permit requirements. (Phil Brna)	Field Inspection, 8/11/99 Notice of Violation, 8/30/99. Finding 1 in Assessment No. JPO-00-A-001, February 2000.	2.5.1.1 / AS 16.05.870 / The LWC was modified without first obtaining a Fish Habitat Permit from the ADF&G. The reconstructed LWC did not comply with five ADF&G permit requirements because it had the potential to block or hinder the efficient passage of fish as water levels fluctuated.	CLOSED based upon Assessment No. JPO-00-A-001, February 2000; (photographic evidence provided to JPO from APSC, prior to 10/15/99).

No.	Incidents of Noncompliance	Source Document / Finding	Notice of Violation: Stipulation/Statute/Description	Current Status / Finding
3	<u>Allison Creek</u> : Material (snow) was placed in the creek and wheeled or tracked equipment entered the creek to remove the snow. (Phil Brna)	Notice of Violation, 1/18/99. APSC Letter No. 99-14083 Finding 1 in Assessment No. JPO-00-A-001, February 2000.	2.5.1.1 / AS 16.05.870 / Deposited snow that was removed from a maintenance yard into the creek. The snow was then removed from the creek using heavy equipment without obtaining a Fish Habitat Permit from the ADF&G.	CLOSED based upon compliance with corrective actions in APSC Letter No. 99-14815; and Assessment No. JPO-00-A-001, February 2000.

Table 2. Incidents of TAPS Noncompliance with Grant / Lease and State Law Resulting in a Notice of Violation

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No.	Incidents of Noncompliance	Source Document / Finding	Notice of Violation: Stipulation/Statute/Description	Current Status / Finding
2	<u>125-APL-4 Access Road:</u> LWC was reconstructed without approval and did not meet five ADF&G permit requirements. (Phil Brna)	Field Inspection, 8/11/99 Notice of Violation, 8/30/99. Finding 1 in Assessment No. JPO-00-A-001, February 2000.	2.5.1.1 / AS 16.05.870 / The LWC was modified without first obtaining a Fish Habitat Permit from the ADF&G. The reconstructed LWC did not comply with five ADF&G permit requirements because it had the potential to block or hinder the efficient passage of fish as water levels fluctuated.	CLOSED based upon Assessment No. JPO-00-A-001, February 2000; (photographic evidence provided to JPO from APSC, prior to 10/15/99).
3	<u>Allison Creek:</u> Material (snow) was placed in the creek and wheeled or tracked equipment entered the creek to remove the snow. (Phil Brna)	Notice of Violation, 1/18/99. APSC Letter No. 99-14083 Finding 1 in Assessment No. JPO-00-A-001, February 2000.	2.5.1.1 / AS 16.05.870 / Deposited snow that was removed from a maintenance yard into the creek. The snow was then removed from the creek using heavy equipment without obtaining a Fish Habitat Permit from the ADF&G.	CLOSED based upon compliance with corrective actions in APSC Letter No. 99-14815; and Assessment No. JPO-00-A-001, February 2000.

6.0 Results and Discussion

Fish passage problems at drainage structures along TAPS are typically identified through surveillance and then scheduled for remedial action to correct any deficiency. Prior to working in fish-bearing waters, APSC applies to ADF&G for a Fish Habitat Permit. During the period between 1997 and 1999, ADF&G issued a mean average of 19 Fish Habitat Permits annually to APSC for their activities in fish-bearing waters. Very few permits issued between 1997 and 1999 were for repairing or maintaining cross-channel structures (minor maintenance of culverts and low water crossings, however, was accomplished under the conditions and stipulations of a “line-wide” Fish Habitat Permit (FG 94-SPO-005) issued by ADF&G).

The lack of repair or maintenance of drainage structures along TAPS in 1998 and 1999 resulted in frequent observations of non-compliance with Stipulation 2.5. In 1998, for example, there were 27 fish passage attributes examined during surveillances; approximately 33 percent (n=9) were in non-compliance with Stipulation 2.5. In 1999, there were 54 fish passage attributes examined during surveillances; approximately 31 percent (n=17) were in non-compliance with Stipulation 2.5. In addition, there were three Notices of Violation of State Law (and stipulation 2.5) issued to APSC, which were not associated with an unsatisfactory condition in the CMP database. This effectively increased non-compliance with Stipulation 2.5 to approximately 37 percent, in 1999.

The February 2000, ADF&G, JPO report: Alyeska Pipeline Service Company Compliance with Fish Passage and Related Environmental, Surveillance, Maintenance and Quality Program Requirements brought the fish passage non-compliance issue into focus. The report concluded that, “Non-compliance with fish passage requirements results from the lack of effective implementation of Alyeska’s internal requirements contained in [their] Environmental, Surveillance and Maintenance programs.” Following this report, APSC developed the “2000 High Priority Closeout Tracking” program to identify and restore efficient fish passage at cross-channel structures along TAPS.

The “2000 High Priority Closeout Tracking” program identified 50 high priority sites requiring remedial action to restore fish passage. These high priority sites and the repair and maintenance of drainage structures at lower priority sites gave rise to the issuance of 75 Fish Habitat Permits in 2000 and 63 Fish Habitat Permits during the first nine months of 2001, which is a four-fold increase in repair or maintenance activity in fish-bearing waters over 1998 and 1999. Work has been completed at 45 of the 50 high priority sites; four sites have been removed from the list following a detailed site evaluation; and work at the last site to restore and establish efficient fish passage is ongoing and scheduled for completion by November 31, 2001.

Surveillances conducted in 2000 revealed a marked decline in the number of “unsatisfactory” conditions recorded in the CMP database. There were 14 fish passage attributes examined during surveillances; approximately 14 percent (n=2) were in non-

compliance with Stipulation 2.5 (both unsatisfactory observations occurred prior to implementation of the “2000 High Priority Closeout Tracking” program).

Minor maintenance of culverts and low water crossings continues to be accomplished under the conditions and stipulations of a “line-wide” Fish Habitat Permit (FG 95-SPO-005 was re-issued as FG 01-SPO-040 in June 2001). Although APSC did not always provide an accurate record or accounting of the number of low water crossings receiving maintenance under this permit, Field Environmental Generalists and Pump Station Managers frequently sent electronic messages to JPO indicating that large segments of TAPS was receiving maintenance under the line-wide permit. During September 2001, for example, they notified JPO that seven low water crossings received minor maintenance under the conditions and stipulations of FG 01-SPO-040.

In 2001, personnel turnover at JPO limited the number of surveillances with fish passage attributes; therefore, comparing 2001 database records with past years surveillances may not be valid. However, ADF&G personnel conducting field inspections did not find, and JPO records do not contain any violations of ADF&G requirements or unsatisfactory conditions or findings for 2001.

7.0 Conclusion

At present, there are no outstanding (or open) findings associated with Grant/Lease Stipulations 2.5.1.1 through 2.5.2.4 (fish passage, spawning beds, or rearing areas) or Alaska Statute 16.05.840 or AS 16.05.870 (the “findings” listed in Tables 1 and 2 have either been closed by previous assessments, by letter or by this assessment). It is evident, however, that between 1998 and June 2000, the repair and maintenance of LWCs and culverts along the TAPS ROW for compliance with ADF&G and Grant/Lease requirements were in response to ADF&G inspections, surveillances or enforcement actions.

There are no findings associated with Stipulation 2.5.3.1 (use of aircraft in ZRAs). JPO files do not contain any occurrences where Alyeska has requested a variance to the use of aircraft in ZRAs during this report period.

There are no findings associated with Stipulation 2.5.4.1. JPO surveillances do not contain any observations or occurrences of large mammal movement being interrupted along the ROW. One Engineering Report, JPO-98-E-028, documented an opportunistic observation of caribou movement and did not indicate any impediment from above ground pipe. A total of 556 big game crossings were constructed in areas known by state and federal biologists as routes traditionally used by moose, bison, and/or caribou. Designated big-game crossings have been designed and maintained along the length of the pipeline. Big game crossings appear as elevated sections (10 feet high and 60 feet long), short buried sections (i.e. sagbend crossings), or long refrigerated buried sections.

As of September 2001, APSC is in compliance with Stipulation 2.5 (and ADF&G) requirements. Only through a proactive TAPS environmental, surveillance and

maintenance program by APSC, and the continued diligent surveillance program by the JPO, can managers be confident that this present level of compliance will continue.

8.0 Personnel Contacted

Marietta Houston, JPO; Susan Anderson, JPO; Anthony Braden, JPO; Phil Bma, JPO; Kenneth Wilson, APSC; Don Keyes, JPO; Mike Thompson, JPO and Gary Reimer, JPO

9.0 Attachments

Referenced Surveillances with UNSAT conditions:

- JPO-98-GS-030, 7/21/98
- JPO-98-S-117, 8/17/98
- JPO-99-S-003, 2/23/99
- JPO-99-S-005, 2/23/99
- JPO-99-S-010, 4/26/99
- JPO-99-S-062, 6/21/99
- JPO-99-S-065, 6/23/99
- JPO-00-S-022, 10/17/99
- JPO-00-S-036, 7/27/00

JPO – CMP Database Report (UNSAT Conditions)

JPO – CMP Database Report (SAT Conditions)

ADF&G, Notice of Violation (Mark Creek), August 26, 1999

ADF&G, Notice of Violation (125 APL-4), August 30, 1999

ADF&G, Notice of Violation (Camp Terry Creek), July 31, 2000

Engineering Report JPO-98-E-028, December 7, 1998

Surveillance JPO-99-S-020, April 27, 1999

Surveillance JPO-99-S-064, June 22, 1999

Surveillance JPO-99-S-066, June 23, 1999

Surveillance JPO-00-S-020, August 11, 1999

Surveillance JPO-99-S-109, October 12, 1999

Surveillance JPO-99-S-022, Rev 1, October 17, 1999

Surveillance JPO-00-S-035, July 8, 2000

Surveillance JPO-00-S-095, September 12, 2000

Assessment JPO-01-A-011

Assessment JPO-00-A-001

Assessment JPO-00-A-004

JPO Letter No. 99-062-JH, August 4, 1999

JPO Letter No. 00-059-MC, July 26, 2000

JPO Letter No. 00-059-JH, September 7, 2000

APSC Letter No. 99-14083, February 17, 1999

APSC Letter No. 99-14815, August 24, 1999

APSC 2000 High Priority Closeout Tracking Spreadsheet

Fish Habitat Permit FG 99-SPO-007

Fish Habitat Permit FG 01-SPO-040

Fish Habitat Permit FG 01-SPO-075

Dennis G. Gnath
ADF&G, Oil Pipelines Coordinator

Anthony J. Braden
ADNR, Chief, Right-of-Way Section

DEPARTMENT OF ENVIRONMENTAL CONSERVATION REPORT

MEMORANDUM

State of Alaska

Department of Environmental Conservation
Division of Statewide Services

TO: John Kerrigan
State Pipeline Coordinator
Joint Pipeline Office

DATE: January 28, 2002

FILE NO:

PHONE NO: 465-5290

FROM: Jeff Mach
Oil and Gas Coordinator
Department of Environmental Conservation

SUBJECT: ADEC TAPS Authorities and
Enforcement Reports

The Department of Environmental Conservation is pleased to provide you with the reports "A Comparison of Alaska Department of Environmental Conservation Authorities and the State of Alaska Right-of-Way Lease for the Trans-Alaska Pipeline System" and "Alaska Department of Environmental Conservation Enforcement Actions Involving Alyeska Pipeline Service Company From 1999 through 2001."

Please contact me if you have any questions, need additional information concerning the reports, or need additional copies of the reports.

cc: Deborah Tennyson, JPO w/ enclosures

*A Summary of
Alaska Department of Environmental Conservation Enforcement Actions Involving
Alyeska Pipeline Service Company
From 1999 Through 2001*

Prepared by
Jeff Mach
Oil and Gas Coordinator
Alaska Department of Environmental Conservation

January 2002

A Summary of Alaska Department of Environmental Conservation Enforcement Actions Involving Alyeska Pipeline Service Company From 1999 Through 2001

January 2002

Introduction

The Alaska Department of Natural Resources (ADNR) and the United States Department of Interior Bureau of Land Management are renewing the State and federal right-of-way leases for the Trans-Alaska Pipeline System (TAPS). As part of that process and at the request of ADNR's State Pipeline Coordinator's Office (SPCO), the Alaska Department of Environmental Conservation (ADEC) has prepared this report to describe:

- Alyeska Pipeline Service Company's (APSC's) compliance with all laws and regulations, from January 1999 through the present, for which ADEC is responsible;
- Specific information about:
 - Civil and criminal proceedings,
 - Notices of Violation,
 - Compliance orders,
 - Instances of non-compliance that did not result in any formal ADEC action,
 - Ongoing investigations that may result in enforcement actions, and
 - Other action that the Commissioner of the Department of Natural Resources should consider in the Commissioner's TAPS right-of-way lease determination; and
- For each instance of non-compliance:
 - How the matter was brought to the ADEC's attention, and
 - Whether the matter has been corrected or is the subject of a corrective action plan approved by ADEC.

APSC Compliance with ADEC Laws and Regulations

APSC's TAPS operations and support activities must meet environmental regulatory requirements in several ADEC program areas, including air quality, water quality, drinking water, wastewater disposal, oil and hazardous substance pollution prevention and response, and solid waste management. APSC employs a sufficient staff of qualified professional environmental scientists and engineers, who are supplemented by written guidance and procedures and personnel training, to guide and carry out the Company's environmental compliance efforts. Given the number and wide distribution of its facilities and the variety of operations and activities that APSC and its contractors engage in, APSC does a very acceptable job overall in meeting the applicable environmental requirements that are the responsibility of ADEC.

Review of ADEC Enforcement Data

ADEC's regulatory programs use an electronic database application, named the Complaint Automated Tracking System or CATS, to track enforcement actions. ADEC programs first started using CATS in 1992, but it was not until 2000 that all programs were using the database.

The CATS database was queried for all records involving "Alyeska Pipeline Service Company," "Alyeska Pipeline," and "Alyeska." To supplement the results of the CATS queries, the manager of each regulatory program was contacted to determine whether any additional enforcement actions had been taken and whether there were any ongoing investigations that were not entered in CATS.

Results

ADEC enforcement actions involving APSC are summarized in Table 1. At the time of this report, the Department had no active enforcement-related corrective action plans and no investigations involving APSC.

Table 1

Alaska Department of Environmental Conservation
Enforcement Actions Involving Alyeska Pipeline Service Company
From 1999 through 2001

Year	Violation	ADEC Action Taken	Status	Comments
1999	APSC violated a condition of the Pump Station 1 Air Quality Permit to Operate by burning field fuel gas that exceeded the allowable maximum concentration of sulfur.	Notice of Violation issued on March 3, 1999.	Corrected. Enforcement action closed.	APSC self-reported the violation after receiving an analysis of the field fuel gas.
1999	Between March and December 1998, APSC loaded crude oil onto tankers at the Valdez Marine Terminal Berth 5 without the use of vapor controls, as required by 18 AAC 50.040(c) (9).	Warning letter issued on May 12, 1999.	Corrected. Enforcement action closed	ADEC identified the violation through compliance monitoring.
2000	APSC filed to install and operate leak detection systems on regulated storage tanks at TAPS pump stations as required by 18 AAC 75.055(c) and the approved TAPS oil discharge prevention and contingency plan.	Notice of Violation issued on June 20, 2000. ADEC and APSC signed a civil settlement agreement on August 17, 2000. The agreement required immediate installation and operation of leak detection systems on all regulated pump station oil storage tanks and payment of approximately \$98,000 in ADEC enforcement costs and	Corrected. Enforcement action closed	ADEC identified the violation through compliance monitoring.

Year	Violation	ADEC Action Taken	Status	Comments
		economic benefits of failure to comply.		
2001	Air emissions from the tanker <i>Polar Endeavor</i> exceeded opacity limits, which is a violation of the Valdez Marine Terminal's Air Quality Permit to Operate.	Informal Notice of Violation issued to Polar Tankers on July 16, 2001. No action taken with respect to APSC.	Corrected. Enforcement action closed.	Witnessed by ADEC staff and self reported by APSC.
2001	APSC failed to test the crude oil transfer piping on Berth 4 at the Valdez Marine Terminal within one year of the previous test, as required by 18 AAC 75.080(c) and the approved facility oil discharge prevention and contingency plan.	Notice of Violation issued on September 28, 2001.	Corrected Enforcement action closed. Work continues to resolve contingency plan-related issues.	ADEC identified the violation through compliance monitoring.

DEPARTMENT OF LABOR REPORT

MEMORANDUM State of Alaska

Department of Labor State Pipeline Coordinator's Office

TO: Debra Tennyson
State TAPS Renewal Coordinator

DATE: January 7, 2002

FROM: Ray Elleven
DOL
TAPS Renewal Liaison

PHONE NO: 271-4142

SUBJECT: TAPS Lease Renewal Compliance Report

The following response provides the status of any compliance issues with State of Alaska Department of Labor and Workplace Development laws and regulations.

Administrative Services Division

The Division of Administrative Services provides management information and support services to the department, develops and distributes labor market and population information, and conducts labor force research. The division's support services include personnel, fiscal, publications, research and analysis, office services, budget, and data processing.

Compliance Issues - None

Employment Securities Division

The Employment Security Division promotes employment, economic stability, and growth by operating a no-fee labor exchange that meets the needs of employers, job seekers, and veterans. By statute, their mission is to foster and promote the welfare of the wage earners of the state, improve their working conditions, and advance their opportunities for profitable employment.

To ensure that job ready workers are available to meet employer needs, the Employment Security Division administers two complementary programs: Employment Services and Unemployment Insurance through a network of Alaska Job Centers around the state.

Compliance Issues - None

Labor Standards and Safety Division

The **Mechanical Inspection Section** of the Labor Standards and Safety Division provides protection through inspection and certification of amusement rides, boiler and pressure vessels, and elevators. The section also inspects electrical and plumbing installations and issues

certificates of fitness to persons performing electrical and plumbing work to ensure the competency of persons performing such work.

Compliance Issues

There have been 821 electrical inspections of Alyeska and its contractors since January 1999 that resulted in 426 Notices of Violations (NOV) issued. Alyeska or its contractor has 30 days to correct a NOV. At any given time there could be an average of ten open NOVs.

The Mechanical Inspection Section does not have any other compliance issues Alyeska.

The **Occupational Safety and Health Section (OSH)** of the Labor Standards and Safety Division aims to protect Alaska workers from industrial accidents and job-related illness through:

- Enforcement of state and federal standards.
- Administering certification programs for asbestos abatement, hazardous painting, and explosives handlers to assure this work is done safely.
- Consultation and Training conducts inspections and safety training at the employer's request.

Compliance Issues

The Occupational Safety and Health Section conducted seven compliance inspections since January 1999. All of the following OSH citations have been closed

October 4, 1999 – Alyeska was cited for having a non-approved hot plate in the VMT laboratory. This was a non-serious violation with no monetary penalty.

April 12, 2000 - Alyeska was cited for having a walkway less than 28" wide in the North Pole Metering facility. This was a non-serious violation with no monetary penalty.

July 26, 2000 – Alyeska was cited for having sharp tips on shelving in the North Pole Metering facility. This was a non-serious violation with no monetary penalty.

July 21, 2000 – Houston Nana JV, an Alyeska contractor, was cited for:

- Improper storage of flammables in a spray-painting area. This was serious violation with a \$1,500 penalty.
- Not having a site-specific respirator protection program. This was a non-serious violation with no monetary penalty.

July 21, 2000 – Alyeska was cited for plumbing the VMT Lower 19 Office buildings with non-potable water. This was a non-serious violation with no monetary penalty.

August 17, 2000 – Alyeska was cited as a result of a fatal vehicle accident.

- The employer allowed employees with nominal experience to operate a Loader and dump truck. This was a serious violation with a \$7,000 penalty.
- The employer failed to notify each employee in the recognition and avoidance of unsafe conditions. This was a serious violation with a \$7,000 penalty.
- The employer failed to have all equipment checked for safe operating condition at the beginning of each shift. This was a serious violation with a \$7,000 penalty.
- The employer failed to maintain the brakes on the dump truck. This was a serious violation with a \$7,000 penalty.
- The employer failed to post a warning sign that the road was closed to vehicles 1 ton or over. This was a serious violation with a \$7,000 penalty.

August 17, 2000 – Houston NANA JV, an Alyeska contractor, was cited as a result of a fatal vehicle accident.

- Houston NANA failed to control the used of unsafe equipment. This was a serious violation with a \$7,000 penalty that was later vacated.
- Houston NANA failed to maintain the Jacobs brake system and tier in safe operating condition as recommended by the manufacture. This was a serious violation with a \$7,000 penalty that was later vacated.

OSH is currently investigating Houston NANA for proper reporting of accidents. This investigation should be completed by February 2002.

The **Wage and Hour Section** of the Labor Standards and Safety Division enforces and administers Alaska labor laws to ensure that workers are justly compensated for their labors and safeguarded from unfair or unscrupulous practices by enforcing and administering Alaska labor laws. This includes enforcement of minimum wages, overtime, child labor laws, right to return transportation, public contract laws, and responsibility for the administration and licensing of private employment agencies

Compliance Issues - None

Vocational Rehabilitation Division

The Alaska Division of Vocational Rehabilitation is a combined federal/state program under the authority of the Rehabilitation Act of 1973, as amended. Its mission is to assist individuals with disabilities, overcome barriers to employment, independence, and community life. Various services are provided to accomplish each client's individualized goals, including a full array of vocational rehabilitation services, supported employment, and assistive technology. In partnership with private sector vendors, nonprofit rehabilitation organizations, and other state agencies, the division helps individuals realize their potential to achieve vocational and personal independence. When individuals with disabilities return to work, state, federal, and local governments benefit. In addition to bringing in tax dollars, these individuals are able to contribute their time and talents as full participants in the community. Employers also benefit from a ready source of trained and willing workers who, in turn, support local communities providing vocational rehabilitation services.

Compliance Issues - None

Workers' Compensation Division

The Workers' Compensation Division is the administrative arm of the Workers' Compensation Board. Its basic purpose is to ensure that Alaska workers who suffer injury or disease from their employment receive medical care and cash wage benefits during disablement through their employers or their employers' insurance companies. The board schedules cases for hearing and issues orders, including formal board decisions.

Compliance Issues - None

Any questions regarding this report should be directed to Ray Elleven, 271-4142.

cc: Ed Flanagan, Commissioner
Remond Henderson, Director Administration Services Division
Rebecca Nance Gamez, Director Employment Securities Division
Duane French, Director Vocational Rehabilitation Division
Paul L. Grossi, Director Workers Compensation Division
Richard Mastriano, Director Labor Standards and Safety Division
Tom Stuart, Chief Occupational Safety & Health
Randy Carr, Chief Wage & Hour
Denney Bowden, Assistant Chief Mechanical Inspection

DEPARTMENT OF PUBLIC SAFETY REPORT

MEMORANDUM

State of Alaska

Department of Public Safety

DATE: May 16, 2002

TO: Pat Pourchot, Commissioner
Department of Natural Resources

FROM: Glenn G. Godfrey, Commissioner
Department of Public Safety

SUBJECT: TAPS Lease Renewal



The Department of Public Safety, which consists of four divisions, Alaska State Troopers, Fish and Wildlife Protection, Administrative Services and Fire Prevention, has found that Alyeska Pipeline Service Company is currently in compliance with State laws, regulations and the right-of-way lease in the areas covered by the Department of Public Safety authority.

The Department of Public Safety does have compliance issues with Alyeska Pipeline Service Company from time to time, primarily in the area of fire prevention. In calendar year 2000, the Division of Fire Prevention started a fire prevention inspection program for Alyeska facilities. The inspection program was made possible through a reimbursable services agreement between our departments. There was a fire prevention inspection conducted in CY 2000 and again in CY 2001. These inspections did identify violations of State fire law, and some of these issues are still open. However, Alyeska has cooperated and continues to cooperate in correcting these items within the time frame established by the Fire Marshal's office. With the ongoing inspection program, there will be some violations open at almost any given time.

Attachment

REGULATORY COMMISSION OF ALASKA REPORT

STATE OF ALASKA
The Regulatory Commission of Alaska
701 West 8th Ave., Suite 300
Anchorage, Alaska 99501-3469
Telephone: (907) 276-6222/Fax (907) 276-0160

Commissioners:

November 19, 2001

G. Nanette Thompson, Chair
Bernie Smith
Patricia M. DeMarco
Will Abbott
James S. Strandberg

TRANS-ALASKA PIPELINE SYSTEM-Violations of AS 42.06 since 1999

Conclusion

The Regulatory Commission of Alaska (RCA) administers AS 42.06, the Pipeline Act. The RCA has reviewed its records (and that of its predecessor agency) for the period 1999 to the present. The RCA has made no finding of any violation of AS 42.06 by the TAPS Carriers during that period.

Explanation

The RCA regulates intrastate oil pipeline carriers under AS 42.06. An entity may not construct or operate an intrastate oil pipeline until it has obtained a certificate of public convenience and necessity from the RCA. The RCA may attach conditions to a certificate and may revoke the certificate if the conditions are not met. An interest in an intrastate oil pipeline may not be transferred without RCA approval. A connection to an intrastate oil pipeline may not be made without RCA permission. Under AS 42.06 an oil pipeline carrier is required to furnish and maintain adequate, efficient and safe service and facilities, and is prohibited from discriminating among its customers. It must file a tariff of rules and rates and run its operations strictly in accordance with its tariff. The rates for service must be just and reasonable. The RCA has continuing oversight and may investigate violations upon complaint or on its own motion.

The Trans Alaska Pipeline System (TAPS) is both an interstate oil pipeline regulated by the Federal Energy Regulatory Commission under the Interstate Commerce Act and an intrastate oil pipeline regulated by the RCA under AS 42.06. TAPS files both interstate and intrastate tariffs, including rates. Oil destined for locations outside Alaska is shipped at interstate rates; oil destined for Alaska refineries is shipped at intrastate rates. Interstate and intrastate rates for comparable service have been equal to date because they are filed pursuant to a comprehensive settlement entered into by the State of Alaska and the TAPS Carriers. That equality of rates could change, depending on the outcome of the general rate case discussed below.

Each of the TAPS owners holds a separate certificate of public convenience and necessity. These certificates were issued to the original TAPS owners without hearings or proceedings under AS 42.06.240(b). In some cases the certificates were transferred from the original owners to successors in interest. The current holders of TAPS certificates are Amerada Hess Pipeline Corporation (Certificate No. 300), BP Pipelines (Alaska) Inc. (311), Exxon Pipeline Company (304), Phillips Transportation Alaska, Inc. (301), Unocal Pipeline Company (312), and Williams Alaska Pipeline Company, L.L.C. (308). Each TAPS owner, as a condition of its certificate, must comply with the federal and state right-of-way leases, AS 42.06, and valid orders of the RCA. All certificates are in good standing, with no allegations of violation.

TAPS was the subject of a number of RCA proceedings ongoing in 1999 and after. Those proceedings fall into four general categories: rate proceedings, quality bank proceedings, transfer proceedings, and connection proceedings. There is also a proceeding relating to allocation of TAPS capacity among the TAPS owners.

A general rate proceeding (in consolidated Dockets P-97-4 and P-97-7) concerning the 1997-2000 intrastate TAPS rates is currently pending before the RCA for decision. The Alaska Public Utilities Commission (APUC), the RCA's predecessor agency under AS 42.06, began that proceeding 1997. (The RCA assumed its duties under AS 42.06 on July 1, 1999) The proceeding was initiated by complaint of Tesoro Alaska Company (Tesoro), then a shipper on TAPS. Tesoro claimed that the transportation rates on TAPS were too high and should be reduced. After extensive prehearing proceedings, a five-week hearing was held in April-May 2001. If the TAPS owners are charging rates higher than just and reasonable levels, they are in violation of AS 42.06. No determination of violation has yet been made. If the RCA determines there is a violation, the TAPS owners will be required to refund excess collections but will not be fined or otherwise punished. There are several other rate proceedings being held in abeyance pending outcome of the general rate proceeding (Dockets P-86-2, P-94-1, and P-00-16). Further proceedings in those dockets might also result in refunds of monies collected by the TAPS Carriers from shippers.

The TAPS Quality Bank is a system of monetary adjustments among TAPS shippers. Oils of different qualities are shipped in the TAPS common stream. Each shipper tenders a specific quality of oil but receives commingled common stream oil out of the pipeline, oil worth either less or more than the oil it tendered. To compensate for that effect, shippers of oil lower in value than the commingled stream are required to pay into the quality bank. Shippers of higher value oil receive payments out of the bank. The system is administered under direction of the TAPS Carriers but the TAPS Carriers do not profit from monies paid into the bank. Proceedings concerning the TAPS Quality Bank (heard concurrently by the FERC and the APUC/RCA) have been under way continuously, including appeals and remands, since 1989 (Dockets P-89-1, P-89-2, P-94-4, P-96-6, P-98-9, and P-9912). TAPS shippers are the primary participants in TAPS Quality Bank proceedings; however, the TAPS Carriers are parties to the proceedings. Allegations were made in the quality bank proceedings that the TAPS Carriers violated AS 42.06 by maintaining unreasonable quality bank provisions. These proceedings were twice resolved by adoption of a contested settlement. In those decisions the

commissions did not directly address the allegations of statutory violations, however, their actions in those decisions were not consistent with a finding of violation.

Since 1999 the RCA has processed a number of requests for transfer of interests in TAPS. Those were routine, unopposed filings. They included transfers of TAPS interests from ARCO to Phillips (Docket P-00-12), Mobil to Williams (P-00-8), Exxon to ExxonMobil (P-00-4), Mobil to ExxonMobil (Docket P-00-7), and BP to Phillips (Docket P-01-8). The affected entities applied for transfers, as required by statute, and the RCA granted permission for the transfers. There were no violations or allegations of violation of AS 42.06 involved in those proceedings.

Since 1999 the RCA has considered three matters concerning connections to TAPS. (1) The RCA granted a temporary connection permit allowing the Northstar Oil Pipeline to connect to TAPS pending review of the terms and conditions of the connection agreement (Docket P-01-6). This was a routine, unopposed filing, not involving a violation or allegation of violation. (2) The RCA is considering general connection policy tariff provisions filed by the TAPS Carriers in 1996 (Docket P-975). A shipper, Tesoro, protested those tariff provisions and a proceeding has been ongoing since 1997. This issue does not involve a violation or allegations of violation of AS 42.06 on the part of the TAPS Carriers. (3) The RCA is considering a new connection agreement for the existing GVEA connection to TAPS (Docket P-971). This is a routine, unopposed filing, not involving a violation or allegation of violation.

A proceeding concerning the allocation of TAPS capacity has been pending since 1997 (Docket P-97-6). There was a preexisting dispute among the TAPS owners as to how to allocate capacity among the owners when TAPS throughput dipped below design capacity. The State of Alaska filed a complaint alleging that contraction of TAPS capacity impeded competitive rate decreases. Tesoro protested TAPS rampdown, alleging that the TAPS Carriers had violated AS 42.06 by not asking permission under AS 42.06.290 to abandon pump stations. A proceeding was opened to hear the State's complaint and Tesoro's rampdown protest. The State and the TAPS owners resolved their differences. Tesoro has told the Commission that it no longer seeks a finding concerning abandonment of pump stations. The RCA is considering whether to close this proceeding.

In conclusion, the only outstanding alleged violations of AS 42.06 by the TAPS Carriers concern their intrastate transportation rates. No finding has yet been made concerning those alleged violations.

DEPARTMENT OF REVENUE REPORT

Alaska Department of Revenue

Tax Division Report to State Pipeline Coordinators Office Compliance by TAPS Lessees with Alaska's Tax Laws November 2001

Background and Summary

As a prerequisite to the renewal of leases for TAPS right of way, The State Pipeline Coordinator's Office (SPCO) requests a report containing specific information relating to compliance with the tax laws administered by the Department of Revenue Tax Division. AS 43.05.230 makes it unlawful to disclose the particulars contained in a tax return or report. This report explains the tax compliance requirements for TAPS Lessees⁶ and Alyeska, including the audit and appeals process. While AS 43.05.230 prohibits the disclosure of tax particulars, this report concludes that there are no tax compliance matters that should adversely affect the TAPS lease renewal determination.

Tax Compliance

As explained in the Department of Revenue report dated June 30, 2000 titled *"DOR Authorities that Apply to TAPS"*, the three state tax types that apply to the TAPS Lessees and/or Alyeska Pipeline Company are the Alaska Corporate Net Income Tax, the Alaska Motor Fuel Tax and the Alaska Oil and Gas Property Tax. Each of these taxes has compliance requirements as summarized below. **In this context, full compliance with tax laws does not mean that the State is in agreement that all taxes, interest and/or penalties owed have been paid. Taxpayers are entitled to dispute tax and penalty assessments, and the exercise of their appeal rights does not constitute non-compliance with tax laws.**

Corporate Income Tax

AS 43.20.030 requires corporations to file returns and pay tax within 30 days of the filing of the federal corporate income tax return. The TAPS Lessees and their affiliated corporations have the most significant economic presence of any industry in Alaska and incur the largest Alaska corporate income tax liabilities. These taxpayers receive a significant portion of available audit resources. The audits deal with complex tax accounting and legal issues, and may result in multi-million dollar assessments for additional tax. It is common for taxpayers to exercise their rights to appeal under AS 43.05, and there are several audits currently at various stages in the appeals process. These appeals and the underlying disagreements about tax issues do not constitute non-compliance. **With the understanding set out in paragraph titled Tax Compliance, all of the TAPS Lessees are in full compliance with the corporate income tax requirements of AS 43.20.**

⁶ The lessees of TAPS are: Amerada Hess Pipeline Corporation; BP Pipelines (Alaska) Inc.; ExxonMobil Pipeline Company; Phillips Transportation Alaska Inc.; Unocal Pipeline Company; and Williams Alaska Pipeline Company, L.L.C.

Motor Fuel Tax

AS 43.65 requires motor fuel tax returns be filed and tax paid by the last day of the month succeeding sale or use. **With the understanding set out in the paragraph titled Tax Compliance all of the TAPS Lessees to which motor fuel tax applies are in full compliance with motor fuel tax requirements of AS 43.65.**

Property Tax

AS 43.56 levies an ad valorem tax on oil and gas property. Taxpayers routinely exercise their appeal rights in determining the correct tax liability. These appeals do not constitute non-compliance. **With the understanding set out in the paragraph titled Tax Compliance, all of the TAPS Lessees are in full compliance with the ad valorem tax requirements of AS 43.56.**

Appendix A: Statutes Pertaining to Taxation of TAPS Lessees and the Pipeline Facility

Term of Lease and Tax Information Confidentiality:

The statutes relevant to this report follow:

AS 38.35.110. TERM OF LEASE. Each lease of state land for pipeline right-of-way purposes must contain a provision that the lease shall run for specified term of not greater than 30 years, and shall be renewable for additional periods of up to 10 years each, so long as the lessee is in commercial operation and is in full compliance with all state law, including but not limited to state law pertaining to regulation and taxation of the pipeline facility, and is in compliance with all terms of the lease. In making this determination the commissioner shall take into consideration the cost of the proposed pipeline, its useful life, and the probable financing requirement for the proposed pipeline.

AS 43.05.230. DISCLOSURE OF TAX RETURNS AND REPORTS.

(a) It is unlawful for a current or former officer, employee, or agent of the state to divulge the amount of income or the particulars set out or disclosed in a report or return made under this title, except

- (1) in connection with official investigations or proceedings of the department, whether judicial or administrative, involving taxes due under this title;
- (2) in connection with official investigations or proceedings of the child support enforcement agency, whether judicial or administrative, involving child support obligations imposed or imposable under AS 25 or AS 47;
- (3) as provided in AS 38.05.036 pertaining to audit functions; and
- (4) as otherwise provided in this section.

(b) The department, upon written request, shall furnish to the taxpayer a copy of the taxpayer's tax return upon payment of a fee of \$1 per page.

(c) The department may permit the proper officer of the United States or of a state, territory or possession of the United States or of Canada or of a province or territory of

Canada, or the officer's authorized representative, to inspect tax returns or reports filed with the department, or may furnish to the officer or representative a copy of the tax return, if the other jurisdiction grants substantially similar privileges to the department or its representative or to counsel for the state, and if the department determines that the other jurisdiction provides adequate safeguards for the confidentiality of the returns and reports, and that the returns and reports will be used for tax purposes only. The department may also permit the employment security division of the state Department of Labor to inspect tax returns or reports filed with the department or may furnish a copy of the tax returns for tax purposes only.

(d) The commissioner may furnish to the Multistate Tax Commission or other authorized agent information contained in the tax returns, reports, related schedules and documents filed under an audit or investigation of a multistate business made by the department. This information may be furnished for tax purposes only. The Multistate Tax Commission or other authorized agent may make the information available to the tax officials of other states, the District of Columbia, and the United States and its territories for tax purposes only.

(e) Nothing in this section prohibits the publication of statistics so classified as to prevent the identification of particular returns or reports or the publication of delinquent lists showing the names of taxpayers who have failed to pay their taxes at the time and in the manner provided by law, together with other relevant information which in the opinion of the department may assist in the collection of delinquent taxes.

(f) A wilful violation of the provisions of this section is punishable by a fine of not more than \$5,000, or by imprisonment for not more than two years, or by both.

(g) The information contained in a license issued by the commissioner of revenue or the commissioner of commerce and economic development under AS 43.50, AS 43.60, AS 43.65, AS 43.70, and AS 43.75 is public information.

(h) The commissioner shall, upon request, furnish to the Department of Natural Resources copies of tax returns, reports, documents filed under AS 43.65, and the Department of Revenue's determinations and workpapers. The Department of Natural Resources shall maintain the confidentiality that the Department of Revenue is required to extend to the returns, reports, documents, determinations, and workpapers furnished to the Department of Natural Resources under this subsection.

Audit

AS 43.05.040 gives the Department of Revenue the authority to audit:

AS 43.05.040. INSPECTION OF RECORDS OR PREMISES AND ISSUANCE OF SUBPOENAS.

(a) The department may examine the books, papers, records, or memoranda of any person to ascertain the correctness of a return filed or to determine whether a tax or a payment for oil or gas royalty or net profits shares under a contract, agreement, or lease

under AS 38.05 is due, or in an investigation or inspection in connection with tax matters or matters relating to oil and gas royalty or net profits under contracts, agreements, or leases under AS 38.05. The records and the premises where a business is conducted shall be open at all reasonable times for official inspection, and the department may subpoena any person to appear and produce books, records, papers, or memoranda bearing upon tax matters or matters relating to oil and gas royalty or net profits under contracts, agreements, or leases under AS 38.05, and to give testimony or answer interrogatories under oath respecting tax matters or matters related to oil and gas royalty or net profits under contracts, agreements, or leases under AS 38.05, and the department may administer oaths to persons who are so subpoenaed. A subpoena issued under this section may compel attendance of a witness or production of a document or thing, located either inside or outside the state, to the maximum extent permitted by law.

(b) A subpoena may be served by the commissioner of public safety or a peace officer designated by the commissioner of public safety, by a person designated by the Department of Revenue, or as otherwise provided by law. A subpoena may also be served by registered or certified mail for delivery restricted only to the person subpoenaed. The return delivery receipt must be addressed so that the receipt is returned to the department.

(c) If a person who is subpoenaed neglects or refuses to obey the subpoena issued as provided in this section, the department may report the fact to the superior court or the appropriate court of another jurisdiction, and may seek an order from the court compelling obedience to the subpoena. The court, to the maximum extent permitted by law, may compel obedience to the subpoena to the same extent as witnesses may be compelled to obey the subpoenas of the court.

AS 43.05.245 gives the department the authority to assess additional tax and AS 43.05.010 gives the commissioner of revenue the authority to request the attorney general to enforce collection of an assessment.

AS 43.05.245. ASSESSMENT AND COLLECTION OF TAX, PENALTIES, AND INTEREST.

If a taxpayer fails to file a return or report required by this title in the time required by law or regulation, or makes an erroneous or fraudulent return, the department shall proceed to assess the license fees, tax, penalties, or interest and make a return from information that it obtains. An assessment or a return subscribed by the department in accordance with this section is presumed sufficient for all legal purposes. However, nothing prevents a taxpayer from presenting evidence or other information in an informal conference under AS 43.05.240 or in an appeal under AS 43.05.241 in order to rebut the presumed sufficiency of an assessment or return subscribed by the department, nor does the presumption of sufficiency alter the parties' respective burdens of proof once the taxpayer has presented evidence or other material information to rebut that presumption. The assessment of license fees, tax, penalties, or interest under this section occurs when the department issues a notice and demand for payment of the license fees, tax, penalties, or interest. The notice and demand for payment is issued when the notice and demand is

delivered to the taxpayer in person or placed in the United States mail, addressed to the last known address of the taxpayer. Penalties and interest assessed under this title shall be collected in the same manner as provided in this title for the collection of tax or license fees.

AS 43.05.010. DUTIES OF COMMISSIONER.

The commissioner of revenue shall

(13) call upon the attorney general to institute actions for recovery of unpaid taxes, fees, excises, additions to tax, penalties, and interest;

(14) issue warrants for the collection of unpaid tax penalties and interest and take all steps necessary and proper to enforce full and complete compliance with the tax, license, excise, and other revenue laws of the state;

Taxpayer Appeals

AS 43.05.240, AS 43.05.241 and AS 43.05.242 give taxpayers the right to appeal the actions of the department.

AS 43.05.240. TAXPAYER REMEDIES.

(a) A taxpayer aggrieved by the action of the department in fixing the amount of a tax or penalty may apply to the department within 60 days after the date of mailing of the notice required to be given to the taxpayer by the department, giving notice of the grievance, and requesting an informal conference to be scheduled with an appeals officer. The taxpayer shall be given access to the taxpayer's file in the department in the matter for preparation for the informal conference. At the informal conference, the taxpayer may present to the appeals officer arguments and evidence relevant to the amount of tax or penalty due the state. If the department determines that a correction is warranted, the department shall make the correction.

(b) A party who believes that the appeals officer is unduly delaying a hearing process may notify the commissioner in writing. Within 30 days after being notified by a party, the commissioner may issue an order prescribing a schedule for the appeals officer to complete the informal conference or setting a meeting at which that schedule will be discussed and prescribed. The schedule may be subsequently modified by consent of the parties. If the commissioner fails to issue an order within 30 days after receiving notice of a party's belief of undue delay, the department's action in fixing the amount of tax or penalty shall be considered to have been summarily affirmed by the appeals officer the same as if an informal conference decision to that effect were issued on the last day of that 30-day period.

AS 43.05.241. ADMINISTRATIVE APPEAL.

For a matter within the jurisdiction of the office of tax appeals under AS 43.05.405, the taxpayer aggrieved by an informal conference decision entered under AS 43.05.240 may file with the office of tax appeals a notice of appeal for formal hearing, as provided in AS 43.05.430, no later than 30 days after service of the decision resulting from an informal conference.

AS 43.05.242. JUDICIAL APPEAL CHALLENGING VALIDITY OF TAX.

(a) Within 30 days after a decision resulting from the informal conference, a person aggrieved by the action of the department under AS 43.05.240 on a ground specified in this section may appeal to the superior court.

(b) An appeal under this section may be taken from an informal conference decision only with respect to an issue in the assessment for tax, interest, and penalties that the taxpayer raises upon the ground that a tax statute or tax regulation is

- (1) violative of the United States Constitution;
- (2) violative of the state constitution; or
- (3) preempted by federal statute, regulation, or treaty.

(c) An appeal of an issue under this section may not be taken from an informal conference decision if

- (1) there is a dispute of material fact;
- (2) a factual record is necessary to decide the question of law raised;
- (3) development of a factual record will render it unnecessary to reach the question of law raised; or
- (4) the taxpayer challenges the assessment of the tax related to the issue on a ground other than one listed in (b) of this section.

(d) An issue may not be presented to the superior court unless the issue first has been presented in writing to the department at or before the informal conference. The department shall prepare a record of that portion of the informal conference relevant to the issue on appeal. The superior court shall

- (1) resolve a question of law in the exercise of the independent judgment of the superior court judge;
- (2) defer to the department on a question of law for which discretion is legally vested in the department unless not supported by a reasonable basis.

(e) An appeal of the informal conference decision under this section is exclusive as to the issue raised. The taxpayer electing to appeal under this section may not pursue an appeal of the issue under AS 43.05.241 or pursue any other action under another statute on the issue.

(f) When an appeal is taken under this section, the taxpayer shall be given access to the file of the department in the matter for preparation of the appeal.

(g) In an appeal under this section, the amount due shall be paid within 30 days after the date of the service of the informal conference decision. In place of payment of the amount due, the taxpayer may file a bond with the court or otherwise obtain relief from payment in accordance with the Alaska Rules of Appellate Procedure.

(h) Venue for an appeal filed under this section shall be set under rules adopted by the supreme court.

(i) If it is determined that appeal was improperly filed under this section, the appeal shall be transferred to the office of tax appeals for further proceedings under AS 43.05.400 - 43.05.499.

TAPS Lease Renewal

Alaska Department of Revenue

Part I

DOR Authorities that Apply to TAPS

June 30, 2000

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Tab 1 - Corporate Income Tax Statutes, Regulations, and Guide to Combined Report

Tab 2 - Motor Fuel Tax Statutes and Regulations

Tab 3 - Property Tax Statutes and Regulations

Overview

In August 1970, eight pipeline companies entered into the Trans Alaska Pipeline System (TAPS) Agreement and agreed to build and operate TAPS. According to this Agreement, each pipeline company owns an undivided interest in TAPS. Each pipeline company agreed to use their TAPS interest as an individual common carrier facility. The Agreement provided for the formation of Alyeska Pipeline Service Company, a corporation that would be an agent for the operation and maintenance of TAPS.

Part I. Corporate Income Tax - AS 43.20/AS 43.19

Taxpayers

AS 43.20 imposes tax on the net income of all corporations doing business in the state. There are two exceptions. Insurance companies pay an insurance premium tax instead of income tax, and corporations recognized under Subchapter S of the Internal Revenue Code are generally exempt. Neither of these exemptions applies to Alyeska or TAPS owner companies.

Unitary Theory and Principles of Apportionment

Most states, including Alaska, use a unitary system to tax corporate income. The unitary system views a group of corporations under common ownership as parts of a single integrated business operation. The common label for the integrated business is the "unitary group". The unitary system ignores the economically artificial boundaries created by separate corporations within a unitary group. This system ignores inter-corporate transactions and determines profits only when a member of the unitary group sells goods and services to an unrelated third party.

The unitary theory is grounded in the precept that there is a flow of value between the members of a unitary group. From a practical standpoint, these flows of value cannot be measured by dissecting each inter-company transaction. Therefore, each taxing jurisdiction claims a piece of the unitary income using a formula to apportion a part of the unitary group. In theory the total of all jurisdictional claims equals 100% of the unitary group's income, no more, no less.

An integrated multinational oil company provides a classic illustration of the unitary theory in operation. Typically, a major oil company consists of hundreds of separate corporations each involved in some specialized aspect of energy production. Separate corporations focus on oil exploration, oil production, refining, product distribution and product sales, not to mention the ancillary functions of administration, advertising and all other functions necessary to run the business. For example, a multinational's production company *could* sell all its oil produced to unrelated companies. However, as John D. Rockefeller learned, an enterprise captures the optimum value from crude oil by refining it and selling the finished product. Under this arrangement, each part of the company contributes to and is dependent on each other part and each part of the enterprise is inextricably intertwined. There is a flow of value between the business segments. Practically, these flows of value cannot be measured by each jurisdiction. The flow of value is the essence of the unitary theory and the impracticality of measuring and auditing each inter-company transaction is the underlying rationale why the apportionment system is widely used by most states.

The alternative to the unitary system is commonly known as "separate accounting". Under separate accounting each separate corporate entity reports only the income and expenses attributed to it. Inter-corporate transactions between related corporations are ostensibly determined under an arm's length standard as if each part of the group were operating independently. Most state tax administrators find separate accounting an inferior method as apportionment. There are innumerable opportunities for taxpayer abuse in structuring inter-company transactions and the difficulty in auditing the staggering number of inter-company transactions and allocations that must be made to separate unitary group.

The Mechanics of Unitary Apportionment

For most taxpayers, Alaska adopts the apportionment formula common to most states. The total income of the unitary group is apportioned to each taxing jurisdiction based upon a formula designed to measure the economic activity undertaken to generate income: payroll, property and sales. The formula, based on these factors, assigns income to each geographic location, dividing the group's entire income among the states where the group conducts business.

Mathematically, we calculate each factor by measuring the activity within Alaska divided by the activity everywhere, to arrive at a percentage for each of the three factors. The percentages are averaged to arrive at an overall Alaska apportionment factor. The factor calculation can be expressed:

$$\frac{\frac{\text{AK Property}}{\text{Everywhere Property}} + \frac{\text{AK Payroll}}{\text{Everywhere Payroll}} + \frac{\text{AK Sales}}{\text{Everywhere Sales}}}{3}$$

We then apply the Alaska apportionment factor to the unitary group income to arrive at the income from activities within Alaska.

Oil and Gas Income Tax History

Before 1981, oil and gas companies computed Alaska income tax using the standard apportionment formula explained above, using property, payroll and sales. These rules are contained in AS 43.19, the Multistate Tax Compact. Upon the production of ANS, the Alaska legislature viewed the standard formula as inadequate to measure the income earned by Alaska production. The legislature passed legislation requiring separate accounting for oil companies only, beginning in 1978. The separate accounting statute, AS 43.21 was in effect for tax years 1978 through 1981. Prompted by oil company litigation challenging the constitutionality of separate accounting, the legislature repealed separate accounting and replaced it with a modified apportionment formula that is in use today.

Special Apportionment Formula for Oil and Gas

The modified apportionment rules of AS 43.20.073 apply only to oil and gas producers and pipeline companies. Oil and gas producers use a two-factor formula of an extraction factor (oil and gas produced in Alaska vs. everywhere) and a property factor. Pipeline companies use a two-factor formula of sales (tariffs) and property. AS 43.20.073 provides that where the unitary business is engaged in both the production and transportation of oil and gas via pipeline, taxpayers apportion income using all three factors.

The Income Base - Water's Edge and Worldwide Apportionment

Before 1991, Alaska required all corporations to apportion their worldwide income to Alaska. In 1991, Alaska enacted "water's edge" legislation. Under the water's edge method taxpayers apportion only U.S. income. This usually lowers the tax. The water's edge rules apply to all corporations *except* oil and gas producers and pipelines; they continue to apportion a part of worldwide income to Alaska.

Special Rules for Oil and Gas.

AS 43.20.021 adopts the Internal Revenue Code (IRC) unless otherwise modified in 43.20. Major modifications include the rule that corporations cannot deduct taxes based on income, and cannot take the foreign tax credit. Certain other modifications to the IRC apply only to oil and gas companies. Oil companies must capitalize intangible drilling costs and use slower depletion and depreciation methods.

Alaska income tax regulations 15 AAC 20 provide rules for computing the income base where income is not required to be reported to the federal government under the IRC. Federally, taxpayers report only the income earned in the U.S. Alaska apportions worldwide income. Therefore, some of the worldwide income does not appear on the taxpayer's U.S. federal income tax returns. Alaska regulations provide that where the income is not required to be reported federally, the taxpayer may report financial statement income or may apply the IRC and report the income as if it were reported to the federal government.

Tax Rates

The same graduated tax rate schedule applies to all corporations. The highest rate is 9.4% and applies to taxable income over \$90,000.

Part II. Motor Fuel Tax - AS 43.40

Overview

AS 43.40 taxes all motor fuel sold, transferred, or consumed in Alaska. AS 43.40.100(2) defines motor fuel as:

"motor fuel" means fuel used in an engine for the propulsion of a motor vehicle or aircraft, and fuel used in and on watercraft for any purpose, or in a stationary engine, machine, or mechanical contrivance that is run by an internal combustion motor..."

Tax Rates/Tax Base

The tax rates vary according to use. Fuel used in licensed motor vehicles carries tax at 8 cents per gallon. The user of fuel used in internal combustion motors not connected with licensed vehicles can get a refund of 6 cents per gallon. Fuel used for heating is not "motor fuel" and other fuel used for specific purposes is exempt from tax. See AS 43.40.100(2)(A) through (L).

Part III. Oil and Gas Exploration, Production and Pipeline Transportation Property Taxes - AS 43.56

Overview

AS 43.56 levies a state property tax at a rate of 2% of the full and true value of taxable property. AS 43.56 also addresses the taxes that municipalities may assess on oil and gas property.

AS 43.56 Property

AS 43.56.210(7)(A) defines taxable property. Taxable property means:

"real and tangible personal property used or committed by contract or other agreement for use within this state primarily in the exploration for, production of, or pipeline transportation of gas or unrefined oil (except for property used solely for the retail distribution or liquefaction of natural gas), or in the operation or maintenance of facilities used in the exploration for, production of, or pipeline transportation of gas or refined oil;"

The above definition includes exploration and production equipment, certain aircraft and motor vehicles and certain pipelines. The North Slope production facilities, the TAPS pipeline, and the Valdez terminal are subject to the tax. Leases, oil and gas in place, oil produced in Alaska, and intangible drilling costs are exempt from the tax.

Taxable property under AS 43.56.210(7)(B) does not include permanent residences, and certain office buildings, and public utility pipelines.

Full and True Value

AS 43.56.060 sets out the methods to determine full and true value for different kinds of property as follows:

For property used for exploration, full value is the amount that a sale would reflect between a knowledgeable and willing buyer and seller.

For property used for production of oil and gas, full value is based upon replacement cost less depreciation based upon the economic life of proven reserves.

For property used for pipeline transportation, the full value is based upon the economic value or actual cost of the pipeline with certain exceptions.

Municipal Taxing Authority Limited

AS 43.56.010 provides that a municipality may levy and collect property taxes with certain amount and rate restrictions. Property taxes that the municipalities collect are credits against the state property tax liability. AS 43.56.030 provides that the state property tax is in place of the municipal property tax and all other municipal taxes including sales taxes on gas and oil and municipal income taxes with certain exceptions.

MEMORANDUM

State of Alaska Department of Revenue Tax Division

DATE: July 27, 2000

TO: Neil Slotnick
Deputy Commissioner, Department of Revenue

FROM: Mark Graber
Group 1 Audit Manager
Tax Division

SUBJECT: RSA TAPS Lease Renewal
Part 2

With reference to your memo to the State Pipeline Coordinator dated May 22, 2000, item 2. of the work order called for a description of "the areas of overlap between DOR authorities and sections or stipulations of the state right of way lease for TAPS".

I have reviewed the TAPS lease and find the following provision:

2. Duration of the Right-of-Way Grant

c. The Commissioner shall renew the Lease for additional periods up to ten (10) years each, so long as the Pipeline is in commercial operation and the Lessees are in full compliance with State law, including but not limited to State law pertaining to regulation and taxation of the Pipeline.

This provision stems from AS 38.35.110:

Term of Lease. Each lease of state land for pipeline right-of-way purposes must contain a provision that the lease shall run for a specified term of not greater than 30 years, and shall be renewable for additional periods of up to 10 years each, so long as the lessee is in commercial operation and is in full compliance with all state law, including but not limited to state law pertaining to regulation and taxation of the pipeline facility, and is in compliance with all terms of the lease...

I believe the information in this memo covers item 2. of the work order.

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Tab 2 - Alaska Motor Fuel Tax Return Booklet/ User Claim for Refund

Tab 3 - AS 43.05.230 Disclosure of Tax Returns and Reports

Tab 4 - Records Retention Schedules

Corporate Income Tax

Filing Requirements, Due Dates

AS 43.20.030 (a) requires that corporations file returns within 30 days after the federal return due date. Section 6072 of the Internal Revenue Code ("IRC") requires taxpayers to file corporate income tax returns on or before the 15th day of the third month after the close of the tax year - for calendar year taxpayers, March 15.

AS 43.20.021 adopts the IRC unless otherwise modified. Alaska therefore adopts the federal rules for extending the filing dates. IRC Sec. 6081 allows for extensions up to 6 months. Maximum federal extensions are the norm for most large corporate taxpayers. This means that for most oil and gas taxpayers, filing on a calendar year basis, the federal return is due the following September 15th, and the Alaska return 30 days later, October 15th.

Overview of Corporate Income Tax Form

As explained in the prior report, Alaska uses combination and apportionment under the unitary method to determine Alaska taxable income. Alaska regulations 15 AAC 20.100 requires that all members of a unitary group file a single consolidated Alaska return. Therefore, since all of the TAPS owner companies are corporations that are parts of larger unitary groups, they file returns with their parent companies.

Partnerships are not taxable entities. Corporate partners report their proportionate share of income and expenses.

Form 04-650 is the Alaska Oil and Gas Corporation Net Income Tax Return. The return consists of several separate schedules that all ultimately flow to the calculation of a tax liability and a tax due or refund amount on page 1 Schedule A. Refunds are common because taxpayers must file quarterly estimated payments (summarized on Schedule C) throughout the year.

Schedule B gives detail on the taxpayers that have been included in the return and identifies the related federal consolidated income tax return.

Schedules D and E compute the Alaska tax liabilities that flow to Schedule A.

Schedules F and G compute tax credits that the Alaska Statutes allow. Schedule F credits are federal credits adopted by reference. These credits reduce tax on a dollar for dollar basis and flow to Schedule A.

Schedule H computes Alaska Apportionable Income and applies the apportionment factor from Schedule I to arrive at Alaska Taxable Income. Starting with Federal Taxable Income, this schedule adds foreign income not reported federally and adjusts Federal income per AS 43.20. Certain federal items are "backed out" on Lines 2(a) through (g) with the corresponding Alaska

amounts entered on Lines 4 (a) through (i), to arrive at worldwide income subject to apportionment.

Schedules I reflect the apportionment factors. Most oil and gas taxpayers use Schedule I. This schedule calculates the average ratio of property, extraction, and sales in Alaska compared to everywhere. This ratio is applied to worldwide income to derive Alaska Taxable income on Schedule H lines 6 and 7.

Because taxpayers file consolidated Alaska returns, this schedule summarizes the apportionment numerators for all corporations doing business in Alaska. For the TAPS owner companies, their tariffs and their cost basis in TAPS is included in the total numerator values (Column A) of Schedule I-1.

Audit Program - Corporate Income Tax

The Tax Division performs an in-depth audit of every oil and gas taxpayer that has significant Alaska activity. These audits typically focus on the adjustments to federal taxable income and the calculation of the apportionment factors. Typically, an audit team conducts the audit with a senior auditor in charge. These audits require hundreds of audit hours and usually are completed within one year of initial fieldwork.

Generally, the audit results in an assessment of additional tax due. The taxpayer is provided with a detailed explanation of the adjustments proposed. The taxpayer may appeal the assessment following the procedures below.

Appeal Program - Corporate Income Tax

Under AS 43.05.240 a taxpayer that disagrees with the audit findings may request an informal conference. An appeals officer within the Division conducts the conference and has the authority to determine the correct tax.

The taxpayer may take an appeal beyond informal conference to the Office of Tax Appeals and from there to the Alaska Superior Court. AS 43.05.242 provides that, under certain circumstances, the taxpayer may appeal directly to the superior court from an informal conference.

As an alternative to litigation, AS 43.05.070 gives the Department the authority to compromise the tax where there is doubt as to the liability of the taxpayer or the collectibility of the tax. Settlements of tax under these circumstances require the approval of the Attorney General.

Collection

AS 43.10.032 specifies that taxes due and unpaid are debts to the state that may be recovered through lien foreclosure or recovered in a civil action brought by the state. Enforcement of collection has rarely if ever, been an issue with oil and gas taxpayers.

Motor Fuel Tax

Filing Requirements, Due Dates

Generally, a licensed motor fuel dealer collects tax from the user at time of sale and remits the tax collected to the Department of Revenue with a motor fuel tax return due monthly. Alternatively, if a person acquires and uses taxable fuel without the tax having been previously paid, then this person ("user") must file a return and pay the tax. See AS 43.40.010(c). Tax returns from dealers and users are due on the last day of the succeeding month of the sale or use - for example, tax for January sales is due on the last day of February.

With respect to TAPS, the operator purchases fuel and claims refunds for non-taxable use and for fuel used in non-licensed vehicles.

Overview of Motor Fuel Tax Forms

Motor fuel forms are at Tab 2. The Motor Fuel Tax Return Booklet contains the forms for dealers to report tax. These forms account for all fuel acquired and disposed of. Each fuel type requires a separate form. The forms report gallons sold/used, the tax rate and tax. The forms also report sales of tax-exempt fuel and imports and exports of fuel.

The User Claim for Refund forms are also attached at Tab 2. These forms give information about non-taxable use and fuel taxed at a lower rate.

Audit Program - Motor Fuel Tax

All motor fuel returns and claims for refund are examined for mathematical correctness and internal consistency. The Motor Fuel Program Director selects certain returns and refund claims for audit based upon audit risk. Considerations include size of operations, reports of compliance problems, and overall likelihood of underreporting.

Appeals Program - Motor Fuel Tax

Taxpayers have the right to appeal assessments under the provisions of AS 43.05.240. The procedures are the same as those described under the Corporate Income Tax section set out previously.

Collections

The collection provisions of AS 43.10.032, as previously described, also to motor fuel tax.

Oil and Gas Property Tax

Approach to Valuation of AS 43.56 Oil and Gas Properties

◆ EXPLORATION PROPERTY

Value based on the estimated price which the property would bring in an open market and under the then prevailing market conditions in a sale between a willing seller and a willing buyer, both conversant with the property and with prevailing general price levels.

The raw data for market value is gathered by the state appraiser by obtaining details of equipment sales, attending auctions and reviewing trade journals. This data is then applied to the subject property, taking into account age, capacity, physical and functional obsolescence.

◆ PRODUCTION PROPERTY

Value is determined on the basis of replacement cost new less depreciation, based on the economic life of the proven reserves.

In the case of an offshore oil or gas platform or onshore facility, the number of years of useful life is determined by when the facility reaches its economic limit, not the projected physical life of the property. That point at which it is estimated that operating revenue will equal operating expense, plus the age of the facility, determines the total life. The depreciation factor becomes remaining life over total life.

◆ PIPELINE TRANSPORTATION PROPERTY

The full and true value of taxable property is determined with due regard to the economic value of the property based on the estimated life of the proven reserves of gas or unrefined oil into the transportation facility; however, if the proven reserve of gas or unrefined oil indicate an economic life materially shorter than the estimated physical life of the transportation facility, the full and true value is the actual cost reduced by an annual allowance for depreciation on a straight line basis over the economic life based on the actual elapsed life from the commencement of full operation to the date of assessment plus the estimated remaining life of the proven reserves of gas and unrefined oil, into the transportation facility as the date of assessment.

Filing Requirements:

Taxpayers are required by statute to file property tax returns by January 15 of each year. The regulations under 15 AAC 56.005 talk about the mandatory property tax statement and filing requirements.

Audit and Appeals Process:

The Division is empowered by AS 43.56.080 to perform audits of the mandatory property tax statements. Assessments are issued on or before March 1. Taxpayers have 20 days from the date of issue to protest the assessment. The Division has 30 days from the date of issue to respond to the taxpayer protests. Taxpayers who are aggrieved have 50 days from the date of issue to appeal the Division decision to the State Assessment Review Board. The Board is required to meet within 80 days of the issue of the assessment notice.

Values are certified on or before June 1. Taxes are due on or before June 30.

Taxpayers are allowed a credit against the state imposed tax up to the 20 mill limit for the amount of taxes paid to local jurisdictions.

Record Keeping**Confidentiality - AS 43.05.230**

AS 43.05.230 makes it unlawful to disclose the particulars of a tax return or report, except under certain circumstances. The text of AS 43.05 is at Tab 3.

Data Capture

The Department uses a relational database, the Tax Accounting System (TAS), to record payment history and certain tax return information.

Records Retention

A copy of the records retention schedules are at Tab 4.

DEPARTMENT OF NATURAL RESOURCES
HISTORY AND ARCHEOLOGY REPORT

DEPARTMENT OF NATURAL RESOURCES

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April 24, 2002

John Kerrigan

State Pipeline Coordinator's Office

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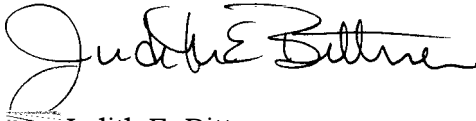
Anchorage, Alaska 99501

Re: TAPS Compliance/State Cultural Resource Laws

Dear Mr. Kerrigan:

The State, through the Office of History and Archaeology (OHA), issues permits for the survey, documentation and/or excavation of archaeological and historic properties on state land (AS 41.35; 11 AAC 16). In the past five years, Alyeska Pipeline Service Company has not requested, nor been issued, a state archaeology permit. Therefore, there are no compliance issues with Alyeska at this time.

Sincerely,



Judith E. Bittner